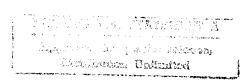
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# East Europe Report

ECONOMIC AND INDUSTRIAL AFFAIRS

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# EAST EUROPE REPORT ECONOMIC AND INDUSTRIAL AFFAIRS

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#### PRODUCTION, COOPERATION IN CEMA CHEMICAL INDUSTRY DETAILED

East Berlin PRESSE-INFORMATIONEN in German No 67, 8 Jun 84 p 2

[Article by Guenther Wyschofsky, Minister for Chemical Industry and chairman of the Permanent Commission for Chemical Industry in CEMA: "New Products and Processes in 35 Years of Close Cooperation"]

[Text] In the countries belonging to CEMA, chemical production increased 29 times from 1950 to 1982. Its rate of development was thus more than twice that of the total industrial production. This carries considerable weight because the chemical industry and its products have appreciable influence on increased efficiency in all areas of the national economy and on the rate of scientific and engineering progress. In CEMA's 35th year of existence the member countries are able to take stock of successful close cooperation.

The Permanent Commission for Chemical Industry proved to be an important factor in the dynamic and all-round development. Its creation in 1956 laid the foundation for comprehensive development of multilateral scientific, engineering, and economic cooperation of the CEMA countries in the chemical, microbiological and cellulose and paper industries. In the first few years its activity was directed toward coordination of reciprocal deliveries of selected products, as well as toward scientific and engineering cooperation in the development of progressive technologies for manufacturing chemical products from petroleum raw materials. The joint construction of the "Friendship" petroleum pipeline by the USSR, the GDR, the CSSR, the PRL and the Hungarian People's Republic made possible the creation of big petrochemical plants and increasingly more extensive use of the raw materials employed.

#### Key to Increased Performance

Particularly since the adoption of CEMA's program for industrial complexes in 1971, international specialization and cooperation have increasingly been the key to improving performance in the chemical industry. Thus, a number of important projects for raw materials supply on a bilateral or multilateral basis were carried out, as well as the construction of big olefin and polyolefin complexes in the CEMA countries. They are connected together by the "Friendship" petroleum pipeline, whereas another member country, the People's Republic of Bulgaria, receives petroleum by sea.

Owing to coordinated cooperation, the production of ethylene rose 2.6 fold from 1976 to 1980, and the reciprocal deliveries of this raw material for plastics, as well as propylene and products of their further processing, became larger. With this dynamic development, there was considerable growth of a crucial raw materials base in the CEMA for plastics, chemical fibers, synthetic rubber, alcohols and detergents.

Coordination of long-term programs of cooperation for the period 1976 to 1980 and beyond, for example in feed additives, dyes, and semifinished products, also led to increased reciprocal deliveries. Thus, the exchange of specialized plant protective agents and pesticides was approximately 124,000 metric tons from 1977 to 1980. In addition, 24,500 metric tons of synthetic dyes were exchanged on the basis of multilateral specialization agreements. Altogether, cooperation succeeded in increasing the share of specialized products in reciprocal deliveries of chemical products from 12 percent in 1975 to 32.8 percent in 1980.

Owing to dynamic specialization and production cooperation in the CEMA, favorable conditions were created for a transition to higher forms of cooperation in chemical research and development. At present there are multilateral agreements or treaties on 25 selected important subjects. As an example, we cite the joint development of the Polymir process\* for production of high-density polyethylene by research collectives of the GDR and the USSR. In a relatively short time they worked up a process and developed the required equipment therefor. Highly efficient plants came into being in 1974 at Novopolotsk and in 1979 at Leuna, where in the past year 75,000 metric tons of high-pressure polyethylene were produced, as well as additional plants in the USSR.

#### Long-Term Target Programs

An important stage for further development and extension of international specialization and cooperation was initiated in 1978-1979 by the adoption of long-term target programs of cooperation up to 1990. These are concerned with energy, raw materials and fuels, industrial consumer items, and the agricultural and food industry, and are chiefly characterized by further integration of production.

For energy, raw materials and fuels alone, 16 multilateral agreements were entered into, 9 of which were for specialization and cooperation in production. In the period 1981-1985 this concerns the areas of synthetic rubber, dyes, plant protective agents, chemical fibers and technological rubber products. Altogether, the cooperative activity thus covers more than 2,600 types of products of the chemical, cellulose and paper, and microbiological industries.

One of the major directions of cooperation in the area of chemical industry up to 1990 consists of putting into effect an efficient geographical distribution and work division in the production of chemical products, so that energy-intensive production processes, for example, are conducted as much as possible in enterprises located near sources of energy and raw materials.

<sup>\*[</sup>Translator's Note: "Polymir" may be a trade name or a misspelling of "Polymer," in which case it should read "polymerization process."]

On the basis of a suitable general agreement, in the present Five-Year Plan period the USSR will supply larger quantities of ammonia, methanol, inorganic fertilizers, and polyethylene to the CEMA countries involved. In exchange, the other CEMA member countries supply proportionally, by way of example, chemical plant protective agents and pesticides, lacquers and paint, synthetic dyes, and polymer additives. A further example of intensive integration is the construction of a plant in Mosyr, USSR, which annually produces 300,000 metric tons of feed yeast. Here the GDR, Republic of Cuba, the PRL and the CSSR are involved.

The results to date show that cooperation of the countries working together within the framework of the Permanent Commission for Chemical Industry has created a good basis for fulfilling the constantly growing demand for chemical products and supplies by the national economies.

5586

CSO: 2300/553

#### GERMAN DEMOCRATIC REPUBLIC

#### FINANCIAL INCENTIVES FOR MAINTENANCE OF PRIVATE HOUSING

West Berlin TAGESSPIEGEL in German 28 Jun 84 p 3

[Article by M. Mara: "GDR Sets New Accents on Housing Construction Policy--Maintaining Old Housing"]

[Text] Recently state and society in the GDR have shown a growing interest in private multifamily housing. For decades it had been left to disintegrate because the low rents prescribed by the state hardly left any scope for needed maintenance and restoration. Moreover, in the past owners quite often were refused the construction materials for urgent repairs. The reason given was that the "state-owned and cooperative housing fund" had priority. No wonder many owners of housing before the building of the wall moved to the West or gradually resigned themselves to the state of affairs on the GDR.

In the meantime, the GDR leadership has recognized the value of old housing and has set new accents in its construction policy. Maintenance and modernization of old housing is increasingly gaining in importance compared with new housing construction. This is in fact the only way the SED can implement its promise to solve the housing problem in the GDR by 1990. Including private multifamily housing makes sense, and so officials emphasize the fact that it will no longer be possible to limit measures of reconstruction and of maintaining the value of housing in the coming years to "stated owned" or cooperative real estate, as has been generally the case in the past.

Private owners of houses report that talks and also negotiations are being conducted with them in connection with the now current intraurban construction measures with a view to including their buildings in the restoration or reconstruction of whole streets and districts. For this reason there has been an increase in promoting the taking up of loans for the restoration of housing in the GDR. So far, however, private owners of houses do not seem all that interested. In Magdeburg, for instance, only 61 such applications were made in 1983 although there are considerably more private multifamily buildings.

The head of the local municipal savings bank, Dr Bernhard Hammerschmidt, described the reserve of owners of private housing as unfounded, saying that "a great deal remains to be done in the next few years" to overcome it.

The effort to win over the private owners of housing is bound to come as a surprise for a number of them. In the past they have quite often been under pressure and constraint with a view to implementing certain construction policy measures and objectives. A large number of private parcels of land were "transferred to state ownership," as GDR jargon has it. GDR laws give the authorities a lot of scope for that kind of action. Kreis councils enjoy the right of preacquisition in the interest of state or society. The state can "claim" private real estate to implement restoration and modernization, revamping and expansion and expropriate owners against moderate compensation.

It appears, however, that this is being done far less than in the past, except when it is necessary to tear down a building because of its poor state of construction. Generally the authorities make an effort to agree with the owners of real estate on solutions with their interests in mind. The East Berlin journal ARCHITEKTUR DER DDR recently cited reasons for this, stating that "transfer to state ownership" led to considerable expenditures for acquisition or compensation which could be avoided. Inasmuch as, in light of the enormous need to catch up, the building capacities in the GDR are insufficient, the intent is to resort more extensively to the initiatives of private housing owners. For example, they generally receive building materials without any particular difficulties.

In addition, says the head of the Magdeburg Municipal Savings Bank, tenants of private housing are entitled to better housing conditions too.

8790

CSO: 2300/556

HUNGARY

#### DECLINE IN NUMBER OF ARTISANS PROBED

Budapest MAGYAR HIRLAP in Hungarian 26 Jun 84 p 7

[Article by Gyongyi Cseszaek: "Shortage of Private Artisans"]

[Text] There are super-villas and there are extremely wealthy men. And, of course, those who build these marvels are also probably beyond everyday worries. And since there are more and more privately built houses, there are more and more wealthy artisans. We can come to this conclusion by looking around. Thus, it is surprising that during the last year the number of artisans in the construction trades barely increased; as a matter of fact, in professions such as tinsmithing, tiled stove-making and wooden floor polishing, it has actually decreased. Yet all those houses are not erected and finished by the good fairy, but probably by those to whom the National Organization of Artisans (KIOSZ) refers as the "invisible sphere," particularly prevalent in the construction industry as the most profitable area. These are the illegal amateurs, who are not sufficiently controlled. They are difficult to catch, perhaps because too many people are interested in their survival. Why should they care about official permits when the work will be completed for less?

#### To Less Troubled Waters

In the construction field, which is much in demand, this trend is more or less understandable. But the most recent report of the KIOSZ makes one think. The report states that beginning with 1982 the momentum of progress has weakened, and since that time the growth in the number of artisans has been decidedly moderate. It is particularly interesting that increases did not take place among full-time artisans, but among part-time ones (those who pursue their crafts while holding another full-time job). What could this mean? Do private artisans switch to the less troubled waters of earning money on a part-time basis, where the risks are smaller, the obligations are fewer, while the "take" is still considerable? What is more, in the agricultural countries even this trend is disappearing. In these locations, according to the statistics, it is more worthwhile to switch to growing fruits, vegetables or to viticulture or animal husbandry. This is the case primarily in the counties of Szabolcs, Hajdu and Bekes.

If we discount the populous branch providing services in passenger and freight transportation, we find that during the last year the number of artisans in all of the other trandes has increased only by 336 persons, and this is definitely not enough. Of course, there is the reasoning of the average individual: realizing his own best interests, he will try to move in the direction of the least resistance. And the conditions of pursuing a trade on a part-time basis have become more favorable, as reflected by the proportion of growth. Among the advantages we see that one does not need a permit from one's employer, one does not have to pay a tuberculosis contribution, and the amount of premiums for accident insurance remains unchanged. In addition, one can test the waters. One does not have to give up a certain income from full-time employment, until one is guaranteed a higher income from private entrepreneurship. There are those who cannot wrestle with the restrictions and in order to avoid more serious problems, they will choose part-time practice. More than one thousand artisans switched from full-time back to part-time activity.

The existing artisans are also restless; most of them are striving to relocate in the cities, or at any rate in larger settlements. In the smaller towns where everyone knows everyone else, the expected demands of the inhabitants are easier to judge. Thus, everyone thinks it over many times: should he take out an artisan permit or not? The result of uncertainty and hesitation: there are no new artisans taking the place of deceased or retired ones. Perspectives like these contain no hopeful promises. The artisans of the cities are somewhat bolder: their perspectives for financially getting on more rapidly and substantially are more promising. And, of course, the circumstances are more favorable as well: One can count on more work, and the possibilities of obtaining materials and parts are somewhat better.

#### All Ill-Considered Move?

It is worth examining the proportion between artisan permits issued and those that have been cancelled. Whatever the circumstances may have been, there were 28,000 permits issued during the past year, although it should not be forgotten for a moment that most of the recipients operate on a part-time basis, and undertakings in the area of transportation are dominant. Looking at it this way, the picture is not quite so pretty! Especially not if we consider the other side of the coin. Here we see that over 17,000 artisans have ceased practicing. This is quite a number, and this way the balance is even more disturbing. The number of permit cancellations does not necessarily have to be this high. A certain lack of care and indifference is instrumental in this. Often the administrators do not care enough to ask why a permit is being turned in; they simply acknowledge the fact, that even though it is frequently an ill-considered move, and with more caring and reasoning the turning in of the artisan permits could be permitted. It is nearly catastrophic that most permits are being given up in the small settlements. These are the places where the level of services is not particularly high to begin with, and if a

private artisan disappears, so does any local possibility for having a shoe fixed or a dress sewn.

Artisans cease operation for two reasons: either the authorities cancel their permits, or they can turn them in. The cancellation of the permit is always a punishment; in most cases there is non-payment of insurance premiums or taxes behind it, but illegal practices or inexpert work also can be the reason. The latter cases have significant effect, because they throw negative light upon the private artisans, but they are not numerous. Much more characteristic is the voluntary turning-in of the permit, in which cases sickness or retirement are frequent reasons, although it is equally true that many artisans accept employment at state-run enterprises or cooperatives, or join private work-collectives. But there are also a significant number of artisans who simply complain about the lack of work, and if their livelihood is not assured, independence is not quite as attractive either ... Obviously there are among these artisans a certain number who started practicing their trade without due consideration and a sufficient material basis, and they have failed.

#### Sensitive Reaction

Road transportation services are flourishing nowadays, with the possible exception of those who operate horse-drawn wagons, which are disappearing. At the same time, auto mechanics are again in demand. The explanation is simple. There are a great many older cars around and they need frequent repairs. The number of men's tailors is declining, and this is understandable: fewer people have their clothes made, because they cannot afford to do so, and, in addition, the ready-to-wear industry has improved. The situation of the dressmakers is less catastrophic, although they face strong competition fromt he boutiques, which often employ illegal part-time workers. There is, however, one trade where the prospects are absolutely hopeless, and that is shoe-repair. The number of shoemakers has further declined, and there are no hopes for replacement. Only in the fashionable professions are there plenty of applicants; there are always many people who want to become hairdressers, cosmeticians, ear-piercers, or managers of health clubs and spas.

According to the report issued by the KIOSz, "responsible measures are urgently needed in order to further increase the number of artisans after the decline of 1982, and in order to eliminate the presently existing negative tendencies." Further quoting from the same report: "Artisans have always been sensitive to socio-political factors and changes of economic regulations; the fluctuations of their numbers have always been a thought-provoking indicator of the shifts in the social and economic sphere. In other words, while a number of positive changes took place in the area of economic regulators, there is still something amiss, at least according to the charts and statistics."

12588

CSO: 2500/447

HUNGARY

#### UTILIZATION OF INDUSTRIAL CAPACITIES STUDIED

Badapest NEPSZABADSAG in Hungarian 27 June 84 p 10

[Article by Jozsef Nyers, KSH [Central Statistical Office] main department head: "Capacity Utilization in Industry"]

[Text] Industry's fixed asset inventory constitutes a significant portion, 13-15 percent of thenational treasure. Next to the land and mineral treasures it is one of the most important production factors. The gross value of fixed assets was 744 billion forints in 1983, 49 percent of this is buildings and structures, about half is machinery and equipment. The share of vehicles and transportation equipment is only 1.5 percent. The role of the machinery park is active and definitive in the production and technological processes; its modernization and utilization are important from the social as well as economic viewpoints.

The international and domestic investigations, and comparisons between countries show that the technological level of our industry can be said to be mediocre when measured by international standards, which is in agreement with our country's general economic development. With respect to content the mediocre technological level manifests itself in being followers in the use of modern technology, slow replacement of obsolete machinery and technologies, slow phasing out of products, long lasting side-by-side coexistence of old, obsolete products and the new ones, and low ratio of research-intensive products. In spite of significant progress having been made in comparison with the earlier situation, the listed characteristics can be found in our industry, even if with varying intensities and to differing extents in the various branches.

The Machinery Inventory's Degree of Modernness

The systematic records taken by the KSH since 1972 make it possible for us to give a more complete and detailed picture about technological development, modernization of the machinery park and the main proportions of automated equipment. As a consequence of improvements made in methodology which are becoming indispensibly necessary in new data gatherings, fundamentally the results of the 1978 and 1982 polls can be compared.

Industry's machinery park increased by almost one-third in the time period between 1978-1982, and this corresponds to a 7 percent growth per year. At the end of the time period in addition to a machinery inventory with the gross value of 363 billion forints, simultaneously machinery and equipment that was depreciated to zero — valued at 88 billion forints — also operated in the industry. The raio of equipment depreciated to zero is 24 percent. As a result of cutbacks in investments and the scarcity of financial means available for development, the ratio of machinery and equipment placed into operation each year in comparison with the operating machinery park has decreased from 13 percent 4 years earlier to 8 percent in 1982.

Simultaneously with the new investments, essentially as a result of them the technical conditions of production are becoming more modern; modernization of the existing machinery park is of lesser significance in this process. In the 4 years studied, machinery and equipment in the value of 194 billion forints was placed into operation, but the technological level of these is not satisfactory in all respects. Often the investments are hardly more than simple replacements. In the years between 1978-1982 the level of the machinery park's automation improved only slightly. According to the 1982 poll 64 percent of the machinery of the state-operated industry's more important basic and auxiliary plants were fully or partially automated compared to 62 percent 4 years earlier. We made significant technical progress in essence in those branches where the machinery from non-ruble accounted import represented a more significant ratio. That is, we purchased the most modern machinery and equipment on the convertibly accounted markets. The technological level of machinery purchased from the socialist countries is also favorable. About half of the machines placed into operation in industry were built in this country, but the technical level of these falls short of the imported machines.

Within the industry there are significant differences in the degree of automation of the individual branches—due mainly to the technological characteristics. Under the influence of the new investments and reconstructions introducing themodern technology the ratio of automated equipment increased significantly among the industry's more important branches in metallurgy and in the food industry (from 45 percent to 69 percent, and from 57 percent to 70 percent, respectively). But three-fourths of these machines and equipment which can be considered modern are only partially automated.

#### Expensive Equipment

In the 4 years studied the average age of the machinery park increased slighlty due to the combined effect of continuing the decreased rate at which they are being retired and the decrease in the investment rate. In 1978 the average age of machinery was 9.3 years, in 1982 this was 9.8 years. The age of machinery in basic plants is somewhat higher than that of the equipment in auxiliary plants. The differences seen in the age of machinery between the various branches are not too significant. The ideas and resolutions concerning selective development are reflected only slightly in the machinery park's age distribution. The electrical

energy industry and metallurgy have extremely high demand for equipment and these are working with older machinery parks (12-13 years) than the average. The average age of machines in the light industry is 11 years; almost half of this machinery park was placed into operation between 1966-1975. As a result of the development policies of the most recent years the ratio of machinery 2 years old or newer is higher than average in mining, metallurgy and in the food industry.

The recently instituted observation of high value industrial investments is useful; it provides significantly more complex information than the earlier systems did about the way the technological level of production is developing. Within the framework of this evaluation the KSH examined the 1982 results of high value investments of production character placed into operation between 1978-1981. We included 97 industrial production units in the evaluation. The invested sum was 44 billion forints which is 6 percent of the value of the total machinery park.

The structure-transforming and product-modernizing role of the facilities placed into operation during the 3 years studied is significantly less than expected and required. The capacities started up were used to produce almost 600 kinds of products, of which 180 products can be considered new, about 100 modernized, and the enterprises were producing more than 300 product types in unchanged form. Thus for half of the products in essence only capacity expansion occurred, without any particular technological improvements.

Statistical measurement of the technological level can by definition never reach the accuracy we have gotten used to in observing the production value, employment and wages, etc., but in spite of this it catches the eye that the technical parameters of the machine—investments are significantly more favorable than the average, but the product structure has hardly become any more modern.

As a joint consequence of the continuous expansion of the fixed asset park and the moderate growth rate of production, utilization of the industry's machinery park has continuously deteriorated since the mid-1970's. Utilization of the calendar time budget decreased by 13 percent between 1976-1983. The machines in the more important production plants of the ministry-controlled industry operated in 53 percent of the calendar time base during last year; in industry as a whole, utilization of the time base by work schedule was 74 percent and this has barely changed in the last 7 years.

The deteriorating utilization of machine capacities characterizes all branches, and differences between the branches can be demonstrated perhaps only in the extent of the loss. The decline in utilization of the calendar time base is particularly striking in the machine industry which operates a low number of shifts to begin with: the ratio of utilizing the time base decreased from 56 percent to 40 percent between 1976-1983, which corresponds to an average daily operating time of 9.6 hours. (It appears from scattered data which can be found in various analyses that in the

machine industry of industrially developed countries the operating time of equipment is significantly higher than this, and can be estimated at an average of 14 hours per day).

As a result of technological characteristics the time base utilization of individual branches is quite varied. Utilization of the calendar time base is highest, 65-80 percent in branches with continuous operation such as metallurgy, chemical industry, some branches of construction material industry and paper industry. In the machine industry, food industry and the majority of light industrial branches the utilization of calendar time base for the basic operating machinery is around 35-55 percent.

As we have already referred to it before, the time base according to work schedule has decreased in the last two years. Many enterprises decreased the number of shifts in some departments, in the majority of cases due to manpower shortage, but decreases in orders and problems with material and parts supplies also caused such results. The largest decrease in the number of shifts was in the machine industry and the food industry.

In industry as a whole about three-fourths of the scheduled working time base is used productively, and one-fourth of it is wasted time. The distribution of downtime of production equipment broken down by causes well characterizes the technical and economic problems which occurred in production conditions in the various time periods. In recent years there was a strong increase in downtime due to problems occurring in the conditions of economic operation (lack of material, component parts, semifinished products, energy and manpower). The share of these factors in wasted time was 24 percent in 1976 and 37 percent in 1983.

### Manpower and Material Shortage

Enterprises were forced periodically to shut down their production equipment most frequently due to manpower shortage. Within the time lost the ratio of lost time due to manpower shortage increased gradually within the 7 years studied, from 12 percent to 16 percent. The most serious manpower problems occurred mainly in the machine industry — and especially in the machine and mechanical equipment industry — plus in the instrument industry, among the light industrial branches in the textile industry and the textile clothing industry.

But the ratio of machine time lost due to lack of orders also increased strongly in the time period studied (from 6 percent to 11 percent). The lack of demand hindered the expansion of production mainly in the machine and chemical industries, the 14 and 17 percent lost time, respectively, can be traced back to this factor. In addition to the moderating domestic and foreign demand the unsatisfactory quality of industrial products, their technological level falling short of the international requirements, in some cases their high price and late deliveries also contributed to the decreased number of orders.

The ratio of downtimes due to material, parts and semifinished product shortages increased until 1982 but decreased somewhat last year; its share was 10.2 percent of the total downtime. Within schedule time the shortage of materials caused major showdowns in the chemical industry, within this in the production of chemical fertilizers and plant protection chemicals, in the pharmaceutical industry, and in the household and cosmetics chemical industry, among themachine industry branches in the transportation equipment industry and also in the communication and vacuum technology industry. In the majority of the branches listed the shortage of materials and parts was caused in 1983 mostly by the lack of non-ruble accounted import materials, and in some cases their late arrivals.

Time spent on planned preventive maintenance makes up almost one-fourth of the downtime, its ratio decreased somewhat during the time period under study.

The ratio of machine time lost due to unexpected breakdowns of machinery increased from 10 percent to 7 years erlier to 16 percent, which is presumably related to the increased ratio of machines depreciated to zero but continuing to operate.

#### Faulty Prognostications

The operating time of high cost industrial facilities is also low. Machinery and equipment in basic plants are productive in only 45 percent of the calendar time base, their degree of utilization does not even reach industry's level. Except for the food industry and metallurgy, utilization of the new production units is lower in all branches than the average of the branch. The work schedules of new facilities is also developed the opposite way from what would have been economically expeditious; the average number of shifts—except for the food industry—is even lower than the branch average which is low to begin with. The study's results show that those making investments overestimated their market, manpower, as well as raw material and semifinished product purchasing possibilities between 1979-1981 also.

Significantly higher demand than the actual was prognosticated for the metallurgical and chemical industry developments, and the ratio of machine downtime due to lack of orders was 65 and 23 percent, respectively, within downtimes at these facilities. The food industry—mainly meat industry—investments did not prove the planned demand either and the ratio of downtime due to lack of demand was 17 percent of the total downtime. Lack of manpower hindered primarily the utilization of new machine industry capacities, one—third of the machine hours were lost because of lack of manpower. The lack of materials, parts and semifinished products caused more severe production losses in the machine industry and chemical industry.

Comparing the technological level of industry's machinery park, the rate of growth with the requirements of the present and future, our achievements

are not too favorable. In the recent past broad-based research work has developed to discover the reasons for our existing weaknesses. I would like to emphasize only that much from these research results that for the most part the poor innovative ability of the production enterprises, the unsatisfactory effectiveness of investments, isolation of the research activity, etc., together have caused the situation to arise where the resources available to us for development purposes were not utilized satisfactorily, technical progress in our industry is rather slow, and utilization of the existing equipment is low.

8584

CSO: 2500/448

MINISTER DISCUSSES GENETIC POTENTIAL OF SEED, LIVESTOCK

Budapest MAGYAR MEZOGAZDASAG in Hungarian No 8, 22 Feb 84 pp 3-4

[Article by Laszlo Papocsi, deputy minister: "Food Production and the Genetic Potential"]

[Text] Biological potential is the most important renewable natural resource of our country and plant production is the primary energy producing source within this potential. If we want to set a new developmental course for food production at the level of producing quality goods, it is indispensable that we should pay more attention to the renewal of the biological foundations, that we increase genetic capacity or we utilize better than before the existing genetic capacity in the interest of reaching our goals.

Domestic food production has achieved significant quantitative advances during the past 2 decades. As support for this statement, it should suffice to mention that, for instance, the yields were doubled in several branches. We are in the forefront of grain and meat production in the world. The modern food industrial capacities built on the basic agricultural activities enable us to export in a processed state an increasingly large proportion of the agricultural products. Per capita consumption has increased and has practically doubled with the increase in production, and foodstuff exports increased to such an extent that, after fully satisfying the domestic demands, by now more than 30 percent of our agrarian products are sold in foreign markets. On the other hand, it also is true that, in a few branches, we have lost ground in international competition, and differentiation between branches or enterprises has increased.

It represents the negative side of our advancement that our results were achieved at the cost of great energy, material and tool expenditures.

In the midst of accelerated world economic changes, the key question of our further advancement has become whether we can meet the steadily increasing competitiveness of international conditions. Our competitiveness must be upheld under unfavorable world economic influences and internal conditions, with more prudent material and energy management and a more efficient production of goods.

#### Intensive Grain Program Proves Itself

We do not want to make basic changes in the structure of our plant production. The development of our grain production continues to be among our foremost agricultural goals. The development of the branch is served by the Intensive Grain Production Program. Through its implementation, higher grain yields were obtained by the farms on 300,000 hectares in 1983-84 and will be obtained on 600,000 hectares in 1985. The program, with its excess grain yield of 460,000 tons, has already proven itself.

The biological side of the advancement possibilities is determined by the productive capacity of the available varieties and hybrids. We consider it of the utmost importance that the results of domestic and foreign genetic research should be utilized as early as possible in general production, and that the seeds of the best varieties should become widely available to the enterprises.

The supply of field crop varieties is judged to be good. Of the 276 varieties in general production, 190 varieties were improved in Hungary. Compared with the yields of plots used for variety comparison, utilization of the potential productive capacity of the grain varieties is 70-80 percent in farm experiments while it is only between 48-60 percent in the national average.

At present, wheat varieties can yield 7-8 tons, winter barley varieties 6-7 tons and corn hybrids 10 tons per hectare. If we could just achieve a 5-6 percent improvement in the average yield of the country, it could lead to a 1 million ton increase in grain export.

It is indicative of the as yet insufficient utilization of possibilities that, for instance, international comparisons show Austria, with a worse environmental condition, is producing 17 kg of wheat and 131 kg sugar beets with the use of 1 kg chemical fertilizer in contrast to the 13 and 64 kg yields, respectively, in Hungary.

It is apparent from the differences in production levels in the different megyes and enterprises that we have significant reserves. It is true that every plant cannot be grown under favorable environmental conditions but the scattering in megyes with the highest and lowest production yields (for instance, the differences in per hectare yield averages are 1,600 kg for wheat and 2,800 kg for corn) can, at any rate, be lowered.

We expect the achievement of our goals in grain production through better utilization of our existing varieties on the one hand, and through the introduction of new, more effective varieties and hybrids into agricultural production on the other. The new varieties and hybrids used in variety experimentation have a productive capacity exceeding by 8-10 percent the biological capacity of those currently in general agricultural production. Thus if the necessary conditions are made available, the possibility for increasing plant production is given also on the longer range.

We have considerable unused resources also for the optimization of plant food use based on the testing of soils. This possibility is still not being utilized by a sufficiently large number of the enterprises.

The smallest results to be considered were achieved in the development of grass production. We could even say that, for a long time, we have hardly made any progress in this area. For instance, the current national yield of 1,700 kg per hectare is exceeded fivefold by the Felszabadulas tsz of Farad or the Gyozelem tsz in Szil. The average yield of the intensively cultivated 230,000 hectare grass area is also two times greater than the national average.

Our climatic conditions do not make it possible to achieve the high grass yields reached in West Europe but, from grass seed composition to production technology, we have every condition available for increasing our grass yields with a suitable approach on the part of the enterprises.

The production of roughage and mass fodders is the most backward branch of tilled land production. As a consequence of small specific yields and large losses of mineral content, growing the necessary amount of fodder still requires a field area considerably larger than justified. In the beginning of the 1980's, we needed nearly 1 million hectares of tilled land for growing mass fodder to supply an animal stock smaller than the current one. Through increasing the specific yields and through more extensive utilization of secondary field products, this can be accomplished today on an area smaller by 16 percent to supply a larger number of animals.

The biological foundations needed for production development are also available to mass fodder production. This is confirmed by the fact that, using the varieties in public production, the leading agricultural enterprises are capable of producing yields of 8-10,000 kg/hectare alfalfa or 35-40,000 kg/hectare silo corn in contrast to the nationwide yields of 5,500 alfalfa and 18-20,000 kg silo corn.

Modernization of the Structure of Animal Raising

The importance of animal raising is shown by the fact that, at present, it represents 51-52 percent of the total value of agricultural production. Nearly 50 percent of foreign trade in agricultural products consists of live animals and animal products. In Hungary, an area of about 3 million hectares is directly serving the production of meat animals. The efficiency of human labor is illustrated by the fact that a worker in animal raising produces, on the average, more than 3 tons of meat animal annually and this (in terms of Hungarian consumption) is sufficient for supplying 40 people with meat for a year. Our meat animal production has increased from 2,027 million tons in 1978 to 2.3 million tons by the end of 1983 representing a 2.5 percent annual increase in production. With respect to per capita meat production, we have reached a leading position in the world because our 146 kg per capita production is surpassed only by Denmark, the Netherlands, New Zealand and Argentina.

Animal products are represented in world export in a much higher proportion than the order of magnitude of our production. Hungary represents 4.1 percent of the world's port export, 6 percent of the egg export and 9-10 percent of the dressed fowl export. At times this advantage also leads to marketing problems.

With respect to the structural proportion of meat-animal production, we can conclude that in Hungary--alone in Europe--the proportion of fodder-consuming animals exceeds 80 percent while ruminants altogether represent 16 percent. This structure is related to domestic potentials, whereby fodder plants can be produced reliably, on the one hand, and the swine and fowl sector--with a more rapid turnover--were the first to be developed as industrial meat producers in the large enterprises, on the other hand.

This development had the result—a situation having a detrimental effect on production efficiency—that cattle—raising has largely been separated from grazing and, mostly in the enterprises with better resources, it was developing on the basis of field—grown mass fodder production.

Indicative of the reserves in animal goods production—in addition to several factors—is the use of fodder as reflected in the products. For instance, the fodder used to produce 1 kg milk is 41-42 dkg in the U.S., 39 dkg in the Netherlands and 36-38 dkg in Hungary. The fodder used to produce 1 kg port is 3.3 kg in Denmark and 3.9 kg in Hungary, at the specialized establishments. The fodder used to produce 1 egg for sale is 11 dkg in the Netherlands and 16 dkg in Hungary, and the fodder used to produce 1 kg dressed chicken is 2.5 kg in Hungary and 1.8 kg in the Netherlands.

Modern varieties or hybrids also are a basic condition for increasing animal production. In this respect, our animal-raising sectors have the greatest potential in the world. In the large enterprises, the genetic productive capacity of the animal stocks can only be realized to 68-78 percent even under nearly optimal raising conditions.

In the cattle sector, for instance, the 4,500-liter productive capacity of the Hungarian spotted cow is 83 percent utilized with the 3,800-liter production yield. At the same time, the Petofi agricultural cooperative in Kocser--with prolonged breeding experiments and a select stock--has been achieving an annual per capita production of over 5,000 liters for years. The imported Holstein-Friesian stock has a genetic potential for producing over 7,000 liters, 85 percent of which is currently realized by the large enterprises.

In cattle stocks, the time between calvings is long. The cows are not being impregnated for 60-80 days longer than justified and this--because of breeding technological or human errors--further impairs the already low biological reproductive capacity.

According to the results of productivity studies involving the large, white, meat-type pig, it is capable of an 800-gram average daily weight

increase; at the same time, a 500-gram daily weight increase as a national average is barely achieved in the industrial-type swine raising establishments. The less than perfect technical and technological conditions are known; nevertheless, increasing the 62 percent utilization of the genetic level must definitely be made our goal.

In the swine branch, considerable possibilities also exist for decreasing the amount of fodder used per 1 kg increase in live weight. In contrast to the 4.11 kg national average, the 10 best enterprises use less by nearly 0.5 kg. Differences among the hybrids can be ignored in this respect because they are producing at nearly identical levels.

In the case of sheep consisting mostly of Merino stock, genetic utilization of wool production is 80 percent but, for instance, in the Viharsarok tsz in Totkomlos, they have been producing 7.6 kg wool per ewe for years. This corresponds to a 90 percent utilization. In the Voros Csillag agricultural cooperative in Turkeve, the rate of increase per 100 ewes has been 139, an average over several years, which is 20 percent more than the national average.

In raising broiler-producing pairs, 450 grams of feed is used for a one-day-old chick in the leading countries; in contrast, this index is still around 600 grams in Hungary. The genetic potential of Hungarian broiler hybrids, belonging among the foremost on an international scale, indicates that by the age of 46 days, 1.8 kg live weight can be reached with the use of 2 kg of feed. In contrast, a live weight of 1.52 kg is reached only after 52 days with the use of 2.4 kg feed in our enterprises. Our backwardness is 28-30 percent of potential. The egg-producing capacity of hybrid layers is greater by 40-50 eggs than shown by the results.

#### Rapidly Applicable Research Results

Possibilities opened up in the discussion above also indicate the requirements in the two basic sectors of food production. Under our economic conditions, there will not be any means available in the near future for a fundamental renewal of the agrotechnology of plant production or the breeding technology of animal raising, but it can be formulated as a requirement that the biological potential be better utilized by spreading the best methods that can be found within the enterprises.

On the 2.9 million hectares of developed crop fields, we will have to reach, by the end of this year, and to stabilize by 1985, a national grain production level of 15 million tons. The best seeds and materials for propagation obtainable from domestic and international integration are available for this, but improvement needs further work.

In cropland feed production, the yields per unit area must be increased and the harvesting losses must be reduced. By increasing productivity, new areas can be freed for grains and industrial plants.

In increasing the productivity of animal raising, the goal is to improve efficiency and to bring about market-oriented production. In the years to come, the gradual loss in the number of cattle must be halted. Within this process, a top priority is to increase the number of beef cattle. With the improvement of the specific yields in dairy production, the number of dairy cows can be proportionally decreased but, in the interest of the basic fattening material, beef cow stocks must be proportionally increased. Maintaining and increasing the level of our beef export is associated with our important export interests.

In the swine and fowl sectors, the goal is to maintain the levels and to adjust production to the prevailing market demands which require appropriate measures this year.

In animal raising, through the general dissemination of energy- and costsaving methods, an increase in our competitiveness must be achieved which can be composed of an improvement in specific yields, the cost-saving use of materials and the spread of energy-saving natural modes of maintaining animals.

A more rapid application of research results is needed. In animal raising, today individual research results still take a very long time to become production practice.

In fulfilling our tasks, we expect research to form the foundations for the qualitative requirements of advancement. Over and above the maintenance of basic research trends and goals, it should also satisfy the new demand for aiding practical usage by better coordinating biological potential, environmental conditions and national economic resources. In the current situation, our task is not to include new areas of research; rather, research results are needed which, precisely by concentrating forces, can be rapidly handed over to practical application. New knowledge is needed which promotes better exploitation precisely of genetic potentials.

2473

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#### UTILIZATION OF GENETIC POTENTIAL URGED

Budapest MAGYAR MEZOGAZDASAG in Hungarian No 8, 22 Feb 84 p 4

[Text] Undoubtedly, the subject mentioned in the title is always timely. But to select it as a topic for a 2-day lecture series is only justified if it can reveal thoughts which will indeed aid practical application in better utilizing the possibilities. Did it do so in Godollo, at the scientific meeting organized in early February? If one considers the intention of the organizers and the message of the lectures, yes; but if one considers the number and proportion of participants, hardly so. A total of 170 lectures were given and experts could discuss 80 subjects for consultation, advertised on posters. Several topics were handled by more than one author; considering this, we can conclude that few practical experts visited the University of Agrarian Sciences or attended the event organized for their benefit. This interest was mentioned by Ferenc Biro, rector of the university, in his opening lecture which stressed that, in this rapidly changing world, knowing and applying the results of science is becoming increasingly indispensable.

In the section on plant production, it was mentioned among other things that current average yields are very much behind achievable yields. Utilization of genetic yield capacity of wheat varieties is around 50 percent on a national average. In good farm enterprises, it is 80-90 percent and in poorer areas it is only 25-30 percent. Why do the winter barley varieties produce 1-1.5 tons less than their capacity, and how could the average yield be increased? What are the agrotechnical factors whose better application would increase our harvest? Which of our reserves should be utilized more and involved in production?

The three sections on plant production were seeking answers to these important questions. The 15 minutes allotted to each lecture turned out to be too short in many instances. Certain subjects perhaps would have deserved a longer lecture considering their economic significance.

A plant producer must have had difficulty choosing among the subjects of the three sections because the lectures on wheat, potato and alfalfa were simultaneous, although all three turned out to be interesting. The 75 lectures were too many; those belonging to identical topics could have been combined. And in spite of this, a third day would have been needed to provide time for debates.

The lectures were a true reflection of the most recent research results, most speakers came from institutions of graduate education and research institutes. Unfortunately, there were proportionally few lectures by experts from farm enterprises and production systems although the practical application of research results could have been an exciting topic at the scientific meeting.

In the animal-raising sections, the researchers mostly exchanged thoughts. How much this sector-especially cattle raising-is in the center of interest was shown by the fact that the lecture hall of the university proved too small to accommodate the sessions of the cattle-raising section. Even the stairs were occupied by people standing or sitting.

The scientists were discussing nothing less than the most suitable method for estimating breeding value under domestic conditions, the production of market goods, quality and the results of the most modern biotechnical procedures. By now, the best varieties and hybrids to be found in the world are available to domestic animal raising. Thus it is primarily up to the research results aimed at the utilization of productive capacity and the enterprises how the numerous contradictions in the animal raising branch can be resolved and how the products of the branch can approach the potential productive capacities. Animal breeders owe us much in this respect because—as voiced by Dr Laszlo Papocsi, deputy minister, in his lecture to the general session—the utilization of the genetic productive capacity, even under modern raising technological conditions, is only 68-78 percent. The words spoken in the animal raising sections served well the utilization of reserves.

In the case of the economy section, the second lecture hall of the university proved to be too large. Discounting the lecturers and their attendants, the work of this section was followed by 10-15 experts although, on the basis of the many, currently very important subjects, it could have commanded much widespread interest.

Unfortunately, at the end of the session meetings, a slightly worn phrase came to my mind: Less would have been more!

Too many lectures—more than 30 in the section—were given in 2 days and indeed there were (quite) a few which added nothing. The simultaneous section meetings at several places at times forced those interested to make a choice, and sometimes they "bet on the wrong horse." It would not have hurt to be selective and eventually to leave more time for debates, comments and questions.

In the economy section, many lectures dealt with the utilization of the genetic and economic potentials, and their associated problems involving enterprise economy, enterprise management, enterprise organization, work organization, innovation and information flow. Many of the lecturers discussed computer technological procedures, machine programs from the economy of the plant protection of wheat, through the examination of the productive capacity of sweet pea varieties by computer; to the systems preparing the decisions to be used in cattle raising.

2473

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#### ROLE OF WATER MANAGEMENT ASSOCIATION NOTED

Budapest NEPSZABADSAG in Hungarian 29 Jun 84 p 3

[Article by Dr Jozsef Koltay, advisor to the National Water Office: "Associations for Public Water Supplies"]

[Text] The so-called associations—in addition to the water management activities of the councils—are now handling increasingly significant tasks in satisfying the daily water requirements.

The water management associations have a special role in fulfilling the socially justified water needs, in improving the production reliability of the agricultural operations in addition to supplying those who live and work in small settlements, as well as in preventing local water damage.

#### Tasks and Opportunities

The activity of associations is not new in our country either. The legal and organizational conditions for their operation were created by law No 1807.XVII and were further enhanced in the middle of the last century-primarily upon the initiatives of Istvan Szechenyi. Perhaps it is not unjustified to quote the inspiring and encouraging words of Istvan Szechenyi for the cause of the association movement—primarily in the interest of flood prevention—: "...I want to implement the organization of this country's waters...at the country's expense only if and only to the extent the private entities can not fully implement it."

Since 1948 the state has taken upon itself the tasks of the so-called water management associations (flood control, drainage, irrigation) which had a long tradition of 175 years to reflect on. But after one decade—in 1958—the water management associations were reorganized with expanded tasks, and further enhanced on several occasions since then—the last time in 1977—to a significant extent. Operation of the new type of water management associations is at this time regulated by a statute enacted in 1977.

As their basic task the water management associations perform water regulation tasks and technical soil protection as well as agricultural water utilization jobs related to these. The public water works associations

are formed for the purpose of implementing public water works in settlements, primarily in towns. The water works associations builds the public works which provide the settlement's water supply, and the public waste water works which handles waste water removal and purification are built by the waste water association. The foundation for creation and operation of the public water works association is the so-called interest relationship. The essence of this is that the legal persons and citizens who actually use real estate within the territory affected by the water facilities—the interested parties voluntarily establish on the basis of the majority principle (at least 51 percent)—the association for the purpose of carrying out the water management tasks in the common interest (public works water supply, public works sewers). The geographically affected minority which does not participate in forming the association (49 percent at the most) will not become members of the association but the interest proportional contribution to the costs of the works are shared by them also.

The National Savings Bank [OTP] makes loans for interest contributions. The investing public water works associations may take outloans for water and sewer works construction for the population's interest contribution at 3 percent interest rate per year. Time for the loan can be as much as 10 years for water works associations and 15 years for sewer works associations.

The country's first public water works association (for water works construction) was formed in Tolna county-in Dombovar-on 20 March 1958. The country's one-thousandth water works association (for sewer construction) was formed in Battonya on 15 January 1981. A few numbers prove well the significance of these associations which can now look back on a past of over a quarter of a century. With the cooperation of the approximately 1,200 public works associations formed in the 1958-1983 time period, water works investments in the value of 13.4 billion forints and sewer works in the value of 4.2 billion forints were completed, more than half of which was pledged by local interests--primarily the residents. Some 85-90 percent of the investments were built in towns. As a result of investments by the associations the improvement of water supply in villages in Hungary in the last 20 years represents an outstanding era in water supply. Village lifestyle has become more urbane due primarily to the effect of the public waterworks. In a short time hundreds of villages switched over in the 1960s from shadoofs to piped water supply.

#### What the Numbers Say

In 1960 only 8 percent of the population of villages—500,000 people—were served by public waterworks. Today there are water works operating in nearly 1,500 small settlements and about 180 towns also have sewer systems. In another approach: two-thirds of the population living in towns enjoy public water supply, and more than 50 percent of them live in homes with running water. On the other hand it is an unfavorable aspect that very few towns have sewer systems—even among those settlements with over 5,000 or 10,000 population.

The growth of water supply in villages is characterized by the fact that—and this to a great extent is the result of the public water works association—while in 1945 the water piping networks in towns did not reach 800 kilometers, and the number of people served barely exceeded 100,000 persons, at the end of 1983 approximately 3.2 million people had running water service and the length of pipe—line networks in the waterworks of towns operated by speciality enterprises approached 22,000 kilometers.

It is notworthy that in the last centry the water works and generally also the sewer works in settlements gaining city rank were almost everywhere built by the associations, and in the last 5 years the water supplies of settlements where public health care was in jeopardy were also begun within the framework of the association program. Significant association investments were implemented during the last two decades in vacation areas along bodies of water, such as in settlements along the shore of Lake Balaton, in the vicinity of Lake Velencei and in the Danube's Turn. And it is also a great achievement that the basic municipal public works were also built by associations in several of our cities, for example, in Baja, Gyula, Kalocsa, Mako, Mezotur, Mohacs and Turkeve.

Last Year's results also reflected well the role of the public water works association. In 1983 the associations spent 1.4 billion forints on water works construction and 0.4 billion forints on sewer system construction. Fifty-four new waterworks and 7 new sewer systems were started up. Last year over 900 kilometers of water pipeline network and about 50 kilometers of sewer networks were completed. As a result of the investments 110,000 people obtained running water—primarily in towns. One significant result is that nearly 80 million forints were spent on sewer system construction projects in the lakeshore settlements of Lake Balaton. The efforts of the associations were favorably affected by the fact that the National Savings Bank continuously and without problems provided the necessary loans.

Compared with previous years, at the new associations formed last year the "differences" in the sum of contribution per family were successfully decreased significantly at both the water works and sewer works associations. Today nationally the amount of interest contribution per family is over 20,000 forints for water works construction and for sewer system construction and sewer related jobs it approaches, and in some cases exceeds 30,000 forints.

The time-proportional fulfillment of the Sixth 5-year Plan is favorable. In the first 3 years (1981-1983) the associations spent a total of 4.7 billion forints on public water works construction. This sum is 65 percent of the 7.2 billion planned for this plan period. As a result of investments made by the associations almost 200 new town water works have been placed into operation during the plan's time period so far, and by the end of last year the ratio of population of towns served by piped-in water has increased to 66 percent (3.2 million persons). During the course of the last 3 years more than 250,000 persons received running water through investments made by the associations.

#### Goals and Viewpoints

Taking also into consideration the currently established needs and the support which can be expected from the state, this year and next year approximately 3.8 billion forints can be expected to be invested by associations in public waterworks. In our opinion with the 8.4-8.5 billion financial performance in the overwhelming majority of the counties the implementation of the projected plans—primarily the increase in the number of residents in towns who are supplied with running water—seems assured.

During the Sixth 5-Year Plan about 350 new town waterworks and 40-50 new sewer systems will have been built with investments by associations. The number of persons supplied with running water by associations in towns in expected to increase by 450,000-500,000 persons in the 1981-1983 time period, and thus at the end of next year the level of town population supplied with public works water will have increased to 68-70 percent. Each year an average of 60-80 kilometers of sewer system network will be built by the association, primarily in towns and especially in the lakeshore settlements of Lake Balaton.

The water and sewer works associations have helped the rapid growth of towns, smaller cities and the more significant vacation regions, and raising the population's standard of living. The justified demand of local interested parties, particularly of the populations of towns for fit drinking water primarily in settlements the public health of which is endangered, and of towns with larger populations, are further increasing the role and significance of the water and sewer works associations.

8584

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TRADE UNION TAKES POSITION ON ECONOMIC REFORMS

Budapest MUNKA in Hungarian Jun 84 pp 1-3

[Article: "After Taking a Position"]

[Text] The April session of the party's Central Committee determined the further development of the economic directive system. The issued position ends the debate which took place during the time of preparation in the delegate working committees, and in part also before the public on the pages of newspapers and magazines. The government was asked to prepare the legal, organizational system of practical implementation and submit it to the national assembly, so that the essential elements of directing would be usable by January 1985. The government with the SZOT's [National Council of Trade Unions] cooperation is working on developing the concrete questions of practical application.

The trade unions agree with the further development of the economic directive system and are cooperating in its introduction and implementation—just as they did in forming the party's position. But their meritorious participation requires that they examine what kinds of organizational and working style adjustments the system of changes that is to be developed will require from the trade unions. This work had already started in the trade council months earlier and will be completed on time.

The party's position clarifies those theoretical questions which were approached by many kinds of individual attitudes in the preparing committees and before the general public. The party's leadership role will be further strengthened in the coming years in economic policy and economic management. As a consequence of this position the party's tasks have been outlined all the way to the basic organizations. Similarly, the state's guiding activity has also become clear: without exception the various types of enterprise management desire the state's cooperation. Development of enterprise independence presumes a more vigorous guidance by the state, better tuned to the economic and financial capabilities. The trade union movement fulfills its tasks and authority by conforming to changing and developing conditions, and relies on the party KB's Central Committee October 1983 position which dealt with the work and tasks of the trade unions.

These theoretical positions—it appears—are evidence, but now when questions of such great importance are placed in the practical focus of everyday life,

they bear greater significance than before because they express that there can be neither argument nor disagreement in these questions.

It is very important that what is involved here is not new economic direction (not a reform of reforms) but the further development of the economic directive system introduced in 1968, and adjustment to the changing foreign and domestic circumstances, opportunities and needs. The directive system itself is a tool the use and application of which serves the goal of making our economic work more efficient, our industrial and agricultural production more modern and more valuable within the framework of the planned socialist economy—even without the numbers of the plan broken down all the way to the level of the enterprises.

It is necessary that the socialist principles we profess should prevail more definitely in the practical, everyday life.

With the preservation of full employment, more economical and more efficient use of the manpower cannot be postponed, it is an organic part of further developing the management system. The clarification is significant in this—which was defined by the trade unions—that ensuring full employment is a task of the state, and that the effective utilization of manpower belongs within the province of the enterprises. This question requires multifaceted organizing work by the state authorities (and the councils), since they have to create appropriate opportunities for work. The responsibilities of those who direct the enterprises is not smaller either, since progress in this area can be made in practice by only very circumspect solutions.

The attitude of egalitarianism — "egalomania"—insistence on this practice, is a rather massive social innervation but it is also one which harms the values, the greater implementation of human values. Society's healthy growth can no longer tolerate this over the long range. The slight improvement seen in recent years cannot, even with the best intentions, be called a broad-based change. The differentiation in shaping the circle of those who are to participate in social benefits will also receive a different emphasis under the circumstances of the further developing guidance system.

Enterprise independence has noticeably improved in recent years. Within the management practices to be developed as a result of a specific position this will become more complete, and so will together with it also the extent of accepting responsibilities and risks. With respect to the trade unions SZOT Secretary General Lajos Mehes also discussed this at the trade council's May session. We quote him:

"A few important characteristics of these changes are that the basic trade union organizations will have greater and greater independence within the trade union. More authority will be transferred from the central leaderships to the basic organizations. We have made the steward system stronger. Today the stewards have broad authority. Based on this we could even say: we are ready when the independence of the enterprises and the individual economic operating units increase; the trade unions can be suitable partners

for them. But I still feel that we have to examine the ways we work and our methods in the interest of learning how we could further strengthen the independence and responsibility of the local authorities, how we could decrease our own bureaucracy."

As we indicated the leader of the trade unions have begun this work. Independence of the local organizations is given much emphasis because the decision-making authority expands with increasing independence from the economic operating units; from planning and development of the product structure to ferreting out the market opportunities which help sales; from manpower management to creating efficient manpower utilization opportunities; from technological development and setting wages and social budgets to handling the personal problems of the individual person.

The favorable opportunity will present itself that the formal elements—which in prior years were useless to management of the enterprises or to trade unions—will decrease or at least become de-emphasized to a greater extent.

Thus, exercising the authority and jurisdiction of the trade unions will have a greater role in the basic organizations than the opportunities of previous years. To adjust and prepare for this well will require multifaceted, broad-based organizing and educational work.

The interest representative and interest protection work deserves special attention since this is part of the "classic" function of trade unions. Assumptions have been voiced that due to the more difficult economic conditions, opportunities for the trade unions have decreased in this area. In his quoted presentation the SZOT's secretary general, speaking about these questions, indicated that "it must also be examined what kind of a system of interest coordination should be developed at the various levels. Beginning with the relationship between the government and SZOT, and continuing with the study of improving cooperation between the branch trade unions, state organs, and the SZOT and the various branches..."

So that the events would not sweep us along, so that we would not be diverted onto paths of forced situations, even in enterprise questions requiring solution, thus: "The trade unions also have a large role in taking the initiatives since with the increase in enterprise independence the operating field of interest representation will expand, trade union membership will increase, as will the local role of the bodies and their officers." ... "no small tasks are awaiting for the trade unions in helping to create greater order, greater discipline at the place of work and in society, and in taking steps against any form of abuse found in society. This, too, is interest protection."

We are referring to things like the relaxed social discipline; but the surfacing of corruption, the distasteful system of lubricating and appreciation monies can also be traced; manipulated incomes, bosses and subordinates acting as accomplices to the disadvantage of society's interests; taking advantage of the benefits of position; the bad manners of representatives of

authorities towards citizens, and also the reverse of this!; problems in the relationship of seller and buyer; paying the worthless who avoid work; personnel and political measures which occur and can be identified as having been taken in as a token of sympathy or antipathy; the arrogance of power seen in some people, or the demagogics of anti-leadership. All these are characteristics contrary to society's healthy and constructive forces, the trade union movement must also take steps against them. The spirit and honor of social order requires this, as does the protection of the interests of the absolute majority.

General improvement of order and discipline is favored by the fact that the earnings, the income of those who live on wages and salary will be more organically related to the profit of the enterprise, thus to the quality of economic operation. It will not be immaterial how many people are working and with what kind of value-producing knowledge and utilization of the working hours. It also will not be immaterial—not even to the individual person—whether the enterprise produces profitable or unprofitable products, at a loss or at a profit, saleable or unsaleable ones. From the employee's viewpoint the place of work will be judged by motivations of personal incomes and earnings ratios.

The extent of paying individual wages will be watched by many eyes and this in itself will create also a new situation because higher or lower hourly wages will have to be set and justified face-to-face. The steward will play a role as the central figure in the work, with the business manager as his partner.

The workers, the local authorities and officers of the trade unions will find themselves under morally more clear circumstances because with the emphasis placed on profit-oriented economic operation the lack of interest will also be peeled off the work of the individual person.

And about one more aspect which will gain influence: the relationship of the individual person to the publicly owned production equipment will change. Irresponsibility, waste, abusive handling of property will adversely affect the individual livelihoods. As this becomes tangible, today's ownership awareness and feeling will undergo favorable changes.

We can justly assume that the significances of interest representation and interest protection at the place of work will further increase, and will be freed of the noticeable formal and make-believe activities.

Actually the individual interests—as motivating springs—will gain an effective role also in transforming the programs which aid production. These programs—the formal elements of which have decreased and which are gaining new momentum now in honor of the 40th anniversary of our country's liberation—will derive their vivacity from the fact that the enterprise, the result and the income will form a closer unity; that primarily not the external incentives but the personal interests will dominate. The simultaneousness of enterprise success resulting from the operation of the GMK's [economic work associations] and the incomes of their participants indicate

that coupling cliche-free value production with interest can greatly increase the enterpreneurial and productive forces. With the further development of economic management the labor movements will preserve their useful traditional characteristics but the basis of their renewal has to be sought in the personal interests which, while conforming to the concrete requirements of the productive activity, also creates its own operating formats.

Introduction of measures and laws which better express social fairness will also take place. When the wage, the income is differentiated according to the value of the work performed to society, differences of income will become the natural thing. This also belongs within the province of social fairness. And so does the premise that the population should participate in bearing the public burdens in proportion with the incomes, accept, of course, with the real wages (incomes) of those who live on wages and salaries. But the development and successful operation of a tax system which serves the proportionate and fair solution of carrying the public burden presumes a more solid public discipline, that is, a tax morale which—along with the established tax system and suitable implementation and control by the state—is also the assurance of social fairness in bearing the public burden.

In the case of social policy, built on good and useful principles, and also on the basis of social fairness one type of correction and reorganization will become necessary and justified, which gives the advantage to strata and groups which need society's assistance the most. But this is not only a need which manifests itself on the national scale, it is valid also in the utilization of the enterprise's social opportunities.

The humanity and fairnesses of socialism can be made more complete only by a moral attitude on the mass scale from which the already mentioned abuses are eliminated and where the forms of action of human relationships are determined not only by laws but primarily by man himself. The trade union movement can and is able to help an the appropriate moral formation of socialist principles.

Therefore the changes which accompany the practical implementation of further developing the economic management system will bring along with them many new problems to be solved. For this very reason the future will require thinking and behavior differing from our usual, customary habits. This will demand serious intellectual efforts even from those who deal with the matters of politics and economics on the daily basis. Because yesterday's answers can not be given for tomorrow's problems. Especially not in practice. This is just as valid for the apparatuses dealing with managing the economy as for the officers of the party and of the trade unions. Meritorious cooperation of the trade unions presumes that our many thousands of activists understand what we want and how we want to implement our intentions.

The theoretical questions of management were concluded with the party's taking of a position. The national measures serving implementation will be prepared this year and with this the nationwide coordination and debates will also come to an end. Beginning with next year—and continuously thereafter—

the elements of implementation will represent the daily tasks of the economic and trade union organs.

The practice which expects to succeed presumes that the operative managers of the economy as well as the local organs of the trade unions and of the party will handle those tasks—and do so as well as possible—which will in the new situation belong into their spheres of operation. The tasks serving identical purposes will be divided even better between the trade unions and the economic managers. The partnership relationships will have to prevail better than in earlier years, including the foremen and stewards.

Our membership—understandably—feels not the principles of economic management but the work which appears during the course of implementation: changes in circumstances at the place of work, the wages, the increased demands for performance, the development of prices, the situation of public supply and others. For them the important thing is the way the enterprise or plant succeeds, whether they are participants in rational production, whether the working conditions are provided for the performance they are expected to produce, and how the wages are developing which provide the livelihood?

Of course the country's population (our membership) should be made to understand much more completely and thoroughly that the opportunity to overcome our economic problems will be possible only in the way contained in the position taken. What is involved here is that the growth opportunities of the socialist economy were being defined and then implemented, the purpose of which is to elevate the socialist society to a higher level.

It is also within the circle of providing information that we prevent new illusions from being generated. Improvement of the management system will not in one fell swoop solve our rather severe economic problems. As a tool it may create a better situation for long-range economic operation, adding to this that improving the productive work is an unchanged condition of better circumstances to come. On the basis of our results we can expect (what will come as the fruit of our steady work performed for years) that our existing economic problems will be largely reduced.

What we wish to achieve by further improvement of the economic management system was summarized in the position taken. The way we wish to implement it is being formulated by the government organs. But implementation will depend on the tens of thousands of managers and on the work of millions.

8584

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# COMPETITION OF FINANCIAL INSTITUTIONS VIEWED

Budapest FIGYELO in Hungarian 28 Jun 84 p 6

[Article by Dr Istvan Fogaras and Dr Kalman Kovacs: "Financial Institutions--Competition For What?"]

[Text] At this time there are operating in the country 598 savings bank branches and offices, 3,192 post offices acting as savings bank agents and 5,616 savings banks (Mutual Aid Savings Banks) offering loans in the enterprises. In addition, 260 savings cooperatives and 1,192 savings cooperatives offices and deposit collection sites offer banking services. On 31 March 1983 these units handled personal and community deposits worth about 230 billion forints in 8.3 million deposit accounts and handled personal and community loans worth about 163 billion forints in 3.4 million credit accounts.

Of this the personal deposits came to 203 billion forints and the personal loans came to 159 billion forints. There was an average of 19,000 forints deposits and 14,900 forints loans per inhabitant.

The Hungarian savings bank organization has traveled a long road in the 145 years since Andras Fay established the first savings bank in his home. An indispensable condition for the development of savings bank activity is a competitive business policy based on a wide variety of services. Naturally, competitiveness presumes competition.

Even if the conditions for competition among the several financial institutions do not appear according to the rules of free competition, still there is competition, among other things, between the financial institutions and other investment possibilities, on the one hand, and for winning the potential customers, in the final analysis for the free monetary implements constituting the basis for financial resources, on the other.

We must note that in general this competition does not mean free conditions. State guidance is realized vigorously with any economic policy--capitalist or socialist. The measures of the chairmen of banks of issue and of ministers of finance always set the interest rates and the credit ceilings.

The concrete behavioral guides offered by the bank of issue frequently influence the identical financial policy, financial practice or a "monetary behavior" with the same content of the financial institutions, as do agreements between the bank of issue and the financial institutions or among financial institutions, and a broad array of monetary tools (discount rate, prime rate, open market policy).

One can frequently read articles and opinions in the domestic press about the necessary development of a cooperative spirit among financial institutions. This has foundation to the extent that the tools of monetary policy should have an economic influence, and there must be a development of the services of the various financial institutions: they should be diversified and cultivated, the technical aspects of payment turnover, especially turnover without ready cash (those saving their ready cash) should be developed, and competition is needed to win the confidence of the customers. But it is without foundation to this extent, that—out of economic interest—it cannot mean the free competition of conditions, the free formation of the price of deposits and credits, ignoring the rank ordering ("priority") of credit goals important from the economic viewpoint.

#### Going and Coming

The financial services offered to the population in Hungary are on a broad scale and they are supported by a respectable network of financial institutions.

From the viewpoint of credit the long-term housing construction and sale credits have priority; each year the National Savings Bank offers long-term credit with favorable conditions for the construction or purchase of about 70,000 to 75,000 dwellings. In addition, long-term credit with the same favorable conditions is offered in 60,000 to 70,000 cases for renovation or modernization of dwellings. These together make up 91 percent of the total outstanding personal credit.

Since 1975 the personal deposits have increased by 150 percent and the personal loans have increased by 205 percent. This is an important index from the viewpoint of a considered, moderating financial policy—the ratio of credits to deposits was 64 percent in 1975, it is 78 percent today. At the end of 1975 the personal deposits not loaned out came to 29.2 billion forints; today it is 44 billion forints, an amount which has filled and still fills the role of a financial reserve.

The financial institution branches, offices and agencies make available to customers 16 forms of deposits (with annual interest rates from 2 to 9 percent) and 35 forms of credits (with annual interest rates from 3 to 15 percent). Of the credits, 24 are long term and 11 are medium and short term. Many possibilities, and many needs; there are many realistic conditions—but still it is certain that the arrangements do not correspond in every respect to the social expectations. Among other things, only the long—term, permanent deposits really ensure protection of the real value of the deposits. It is true that the long—term credits help to satisfy the housing needs, but a solution of the housing problem on a social scale—

especially for young families—is a complex task. This is connected with savings bank business policy, but a solution of the housing problme is primarily a task for economic policy and social policy.

Bank offices are developing now, involving intrepreneurial banking activity at the OTP [National Savings Bank]. They recently established an Undertakings Office (see FIGYELO, No 10, 1984), the OTP Budapest Real Estate Brokerage Office and the OTP Penta Tours travel office. These may not represent a "challenge" to arouse a competitive spirit, but they do contribute to the development of financial services.

# Bonds Versus Deposits

But under the heading of competitive spirit we sometimes do meet with signs of a challenge already. Let us look at one example in connection with this!

On 20 March 1984 there appeared a joint invitation of the State Development Bank and the Skala Coop for 7-year-term Skala bonds paying 11 percent per year. The time limit for paying in the value of the bonds quoted at 10,000 forint denominations was 31 May 1984. The repayment plan is as follows:

Date Due	<u>Interest</u> (in for:	Repayment ints)
31 May 1985	1,100	
31 May 1986	1,100	
31 May 1987	1,100	
31 May 1988	1,100	2,500
31 May 1989	825	
•	(on 7,500)	2,500
31 May 1990	550	
-	(on 5,000)	2,500
31 May 1991	275	
•	(on 2,500)	2,500
Tota1	6,050	10,000

So in the case of the Skala Coop bond the bond owner pays down 10,000 forints, in the case of one denomination, his capital is completely tied up for 4 years, then from the end of the fourth year he gets back the nominal value of his invested capital in four equal parts, for an interest return of 11 percent per year for the capital currently held.

This means that the 6,050 forint interest yield during the 7 years is 11 percent annual interest calculated on an average deposit of 7,860 forints. Calculated on the initial 10,000 forints this income corresponds to an 8.6 percent yield per year—but in the meantime the subscriber is paid the interest every year, and from 31 May 1988, for 4 years, he has 2,500 forints per year coming free, which he could put out at interest again.

What sort of interest income does this offer as compared to putting it out in a 7-year financial institution savings certificate?

The interest rate on this, for 7 years, is an annual 9 percent, and is calculated at compounded interest. The yield in 7 years on a 10,000 forint savings certificate is 8,280 forints, thus 2,230 forints more than for the Skala Coop bond, and the annual income yield is 11.8 percent—if it is left in the entire 7 years. But if we calculate that the customers place their money in the OTP according to the conditions whereby the bonds tie up capital, in that case, according to the OTP conditions, the yield is 4,025 forints instead of 6,050 forints, thus 2,025 forints less.

Further conditions: the savings certificate can be withdrawn at any time. In this case, however, the interest rate is lower (if it is withdrawn within one year no interest is paid), so from the viewpoint of income yield early withdrawal has an economic sanction. In addition the interest cannot be withdrawn except with the capital, although a higher denomination savings certificate (the highest sum is 50,000 forints) can be exchanged without economic disadvantage for lower sum savings certificates (the lowest denomination is 5,000 forints), whereas the bond could be "sold" if necessary. It is an open question at this time where and under what conditions, with what premium (how many percent above nominal value) or discount (how many percent below the nominal value), the bonds could be sold, taking into consideration the remaining time the bond had to run.

In essence three conditions determine, in ways which contradict one another, the profitability of investments.

--credit standing (in the given case there is state backing for both bonds and savings certificates);

-liquidity (the savings certificate can be withdrawn at any time, but then there is a reduction in the interest; the bond has to be sold); and

-- the interest rate (we have illustrated various calculation methods with concrete examples).

In general the income is greater the greater the credit risk or the longer the time the investor ties up his deposit.

If the customer has sufficient and objective information about financial institution services—not a simple task, because the customer is not a bank expert!—then he proceeds according to his individual decision, adequately supported. This is influenced by his present and future income situation, needs and requirements and, as a function of all this, the amount of money he feels free to dispose of, which he wants to put out, tie up or invest—in the interest of acquiring extra income.

A competitive business policy must take into consideration the interests of the population together with the interest of the financial institution. A wide variety of modern financial services will help accomplish this. The competitive behavior of socialist financial institutions must be in harmony with the goals of economic policy and monetary policy therein, and must aid the realization of these goals.

8984

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#### HEAD OF RADIO ENGINEERING PLANTS GIVES BUSINESS INTERVIEW

Budapest FIGYELO in Hungarian 28 Jun 84 p 5

[Interview with Dr Rudolf Molnar, director of the Remix Radio Technology Enterprise, by Dr Gyorgy Varga]

[Text] [Question] You were named director of Remix in October 1979. When you came here, in what situation did you find the enterprise?

[Answer] The situation was most difficult, especially from the market view-point. Demand had declined considerably for the parts manufactured by Remix--resistors, condensers, potentiometers, etc.--the majority of which the enterprise had been manufacturing for 15-20 years. In the course of the 1980 price adjustment the average price level of the products of the enterprise was reduced by 27 percent. Overall the 1979 receipts of the enterprise of 970 million forints fell to 638 million in 1980 and its profit fell from 170 million to 34 million forints. So the decline was quite dramatic.

[Question] What were your first measures?

[Answer] First of all I got to know the personnel of the enterprise and I made a basic study of its "economic history." I studied the development of its economic indexes going back 10 years.

The leaders were weak in many places and there were many managerial positions. In June 1981 we carried out a profound organizational change; we abolished or combined a few main departments, departments and jobs. As a result of all this we reduced managerial personnel by nearly 25 percent.

[Question] Did you bring in new managers from outside?

[Answer] No. The interesting thing was that I found a very talented middle management staff at the enterprise and in essence this staff was promoted.

[Question] What changes took place in the production structure of the enterprise?

[Answer] What I say is certainly surprising, but in 1980 the enterprise did not have to discover in what direction it should go, because developed

ideas for this were in the desk drawers. We just had to pull them out and start working. For example, within the framework of OMFB [National Technical Development Committee]-Siemens S&T cooperation we proposed to the OMFB and the branch ministry the purchase of a layer-resistor-manufacturing and a layer-condenser-manufacturing line, both of Siemens manufacture. The latter was also a world patent. We signed the contract with Siemens at the end of January 1980 and within the next 18 months-as we planned-we put the first machine line into operation, and the second 6 months later.

Our newest development is the hybrid circuit, which is a significant step in the direction of manufacturing active circuits. One year ago we signed a credit agreement with the Hungarian National Bank to finance the necessary equipment. The equipment is being delivered by the French SAT electronics firm.

In the interest of modernizing and improving the efficiency of production we had to reorganize the factory units as well. They had mixed trades. They manufactured everything. We put an end to this situation and by the end of 1983 we had specialized the factory units. Our factory in Szombathely manufactures resistors, condensers and noise filters. Our factory in Tiszakecske manufactures only potentiometers, and the Budapest factory manufactures only hybrid circuits. Every factory unit became a closed technological system.

[Question] I would like to talk in more detail about your link with Siemens.

[Answer] In the first place we bought technology from them, as I said already, in the interest of laying the foundations for modern parts manufacture. In the second place we have a 38-percent share in the Sicontact joint enterprise, and through it we lease modern equipment—a line for manufacturing polypropylene and polyester condensers. The greatest value of the cooperation for us is the acquisition of a developed technical sophistication.

[Question] What part in the Remix fixed assets is represented by equipment from Siemens?

[Answer] Together with licensing, about 40 percent.

[Question] Does this situation not produce a disadvantageous or uncertain technical dependence?

[Answer] Certain modern technologies presume the use of material types of such purity that we cannot obtain them. We searched in vain on the CEMA market for luoxide ceramics or certain thicknesses of polypropylene foil, etc. The other sensitive point is spare parts. These cannot be obtained in this region. While the dependence is a fact—and this is a natural concomitant of the international division of labor—the alternative to it is to preserve the technical backwardness, and we cannot assume this greatest risk. The dependence is not so strong within the sphere of S&T information and production.

[Question] How economical is the use of foreign technology?

[Answer] Let us take resistor manufacture as an example. On the new manufacturing line the value of annual production is 120 million forints. This is produced by 17 people. With the old technology this production value was produced by 200-250 people. We can speak of an improvement of labor productivity on a totally different scale, not to mention the quality differences between the old and the new product. According to our approximate calculations Remix has replaced, since 1979, convertible accounting import worth about 350 million forints.

[Question] The enterprise has made the development of professional parts manufacture its strategic goal. What was the reason for this choice.

[Answer] Remix could hardly be competitive against the firms of the Southeast Asian countries, which manufacture billions of parts for consumer electronics. This necessarily prompted us to manufacture high priced parts with the same expenditure. And this can be done in the area of professional electronics. The average profit content of parts for consumer purposes is 2-3 percent; it is 20-25 percent for the professional parts. This is the explanation why Remix is moving in the direction of developing high technology products with a larger added value content.

[Question] The development of hybrid circuits--that is, those containing both passive and active elements--shows this. But the business considerations hiding in the development are not entirely clear.

[Answer] This is what is involved—Remix could live from good quality, modern passive parts too. But the really profitable activity, with a high profit ratio, is equipment manufacture. The sales receipts proportional profit is 18-23 percent there, it is 12-14 percent for us. So if we want to get a greater yield than at present from the given resources then we must take steps in the direction of device manufacture; we must increase the degree of finish for our products. This cannot be done from passive parts. So we got into the development of the hybrid circuit technology.

[Question] The stock of modern fixed assets at Remix has increased at a fast pace in a relatively short time. How are these being utilized?

[Answer] The capacity utilization of the layer-resistor-manufacturing line is good. But utilization of the layer-condenser-manufacturing capacity is only 50-60 percent. We are now preparing a design change with which we will be able to increase utilization to 80 percent.

[Question] The development of hybrid circuits began at one time in the Signal Technology Research Institute. The institute is now part of the Microelectronics Enterprise (MEV), What do you think, is some sort of cooperation in this area possible between Remix and the MEV?

[Answer] The MEV is making hybrid circuits, too. The situation is that in certain areas we are coordinating our activities. For example, in the areas of developing or acquiring active circuits, or in the area of

materials import. But on the market we separate. The domestic user will decide whose products he will buy. It is my feeling that from the market viewpoint we gained a certain advantage, because in 1980 we sold hybrid circuits worth 40 million forints, but in 1984 we will sell hybrid circuits worth about 100-170 million forints.

[Question] If it were possible, what percentage of your present products would you rather give up?

[Answer] Products making up about 60 percent of our production are old ones—we have been manufacturing them for more than 3 years. In theory we would gladly give these up. I would not necessarily give up the profile, but I would end the production of concrete products.

[Question] From what sources have you covered the developments?

[Answer] In 3 years we have invested about 400 million forints in fixed assets. This money came from many sources. These included credit, developmental supports and our own resources. The net value of the fixed assets of the enterprise increased between 1979 and 1983 from 230 million forints to 430-440 million forints by the end of 1983; the gross value of this exceeds 600 million. In 3 years the technical equipment level increased by 80 percent; productivity increased at a rate somewhat slower than this.

As a result of the 400 million development the sales receipts of the enterprise increased from 658 million forints in 1980 to 962 million in 1983; profit increased from 34 million forints to 130 million; and thus far we have realized the goals expected from the developments.

[Question] The industrially developed countries work in their electronics industries almost without waste and parts with quality faults cannot leave the factory. How do you evaluate the work of Remix from this viewpoint?

[Answer] Waste decreases year by year together with increasing production, but even so lack of precision causes a loss of 30-40 million per year.

[Question] A spectacular technical development has been carried out at Remix. How has this affected the price level of the products of the enterprise?

[Answer] It is a fact that on the average Remix exceeds the price level of imported parts by 10-20 percent; that is, we are more expensive by this amount. One reason for this, first of all, is that the capital and machine costs have increased considerably, which cannot be compensated for by savings in costs of lowly valued human labor. But you should not forget that our customers are large enterprises which, if they find the Remix products too expensive, will find a way to import.

[Question] Are there price disputes with the users?

[Answer] Only rarely in recent years. But you should know that Elektromodul is the customer for about 70 percent of our sales.

[Question] In market economies an average 4-year cycle time is characteristic of the price curve of electronic parts, thus a sudden increase in the price of a new product is followed by a relatively steep price drop. In your opinion, is this true of the products of Remix also?

[Answer] Since the market is deformed for us the price curve cannot follow the law mentioned by you. Still, we do try to reduce the price level. For example, if the second Siemens resistor-manufacturing-line gets started and this increases the mass nature of production we will certainly reduce the price considerably.

[Question] What is the place of the factory units of Remix in the enterprise hierarchy?

[Answer] The factories have enjoyed a high degree of independence since the reordering of the production profiles. We prescribe for the factory units the total and proportion of the cover to be attained; in all else they decide virtually independently.

[Question] Still, what does the enterpise decide about?

[Answer] About commercial, price and development policy, about acquisition policy and materials management, which we would like to decentralize but cannot in the present situation. It is true that we have decentralized the reference framework, and the factory units fulfill it with orders. Since the technology determines what the factories can manufacture the needs appear there and the factories handle them.

Now we want to go further. For example, manufacture of resistors and condensers takes place in Szombathely. It would be rational to move development there too, because we concentrated the equipment there and they have the production experience there too. We set up a product directorate for hybrid circuit manufacture which concentrates everything in one hand from development to marketing. The tool and special machine plant operating in the directorate works primarily for the factory units. So organizationally it would be good to link them.

[Question] I do not dispute the rationality of the aspirations just described, but if I think about what the enterprise center is deciding about and how Elektromodul has a 70 percent share in your sales, it does not appear convincing to say that the factory units enjoy great independence in substantive questions.

[Answer] I would like to remind you that the factory units do decide independently in tactical and implementing matters, in organizing their production, in technical guidance and in matters concerning wage, personnel size and personal questions, interdependent with these matters. Since the beginning of this year they independently carry out certain product development tasks also. They have an advisory, decision preparation and consultative role in working out the strategic questions of the enterprise.

[Question] Are you not afraid that if the factory units become more independent some of them may become subsidiary enterprises and the idea of a complete break may mature within them?

[Answer] Look, it is difficult to keep an enterprise together with subjective tools. I know that not a few put the cohesion on "objective" foundations by locating technologies in such a way that the factory units are forced to cooperate from top to bottom. It is better not to talk about what this costs, but it is a fact that since the decentralization wave started internal cooperation has been increasing at the enterprises, which works as an artificial cohesive force.

Nevertheless, let us study the possibility of organizational changes which increase the independence of the factory units and which would increase their operations, their efficiency. This might make more clear also where the enterprise should invest.

[Question] In industrially developed countries it is common for the manufacturers of equipment to aid the manufacturers of parts with capital and technology. Are there such efforts in Hungary also?

[Answer] I do not know of such a thing, although it would be logical, because profitability is greater in that phase of manufacture than it is in parts manufacture. But Remix is seeking possibilities for undertakings outside the enterprise. Several things are in preparation. For example, we would like to establish several joint enterprises to produce various products. With the hybrid circuits we want to get into the manufacture of personal computers. It is probable that we will transfer the manufacture of some products, more precisely their assembly, to small undertakings. On the basis of Japanese and Swiss experience and our own initial experience we would like to expand the putting-out system which saves on assets. It is possible that it would be useful to form a joint enterprise for warehousing too. I will not go on. The essential thing is that we are willing to get involved in any theme related to our sphere of activity, if we can make extra income thereby.

[Question] If you had free capital now, what would you invest in?

[Answer] Not necessarily in Remix. I would look for an investment opportunity which promised a better return than ours, where the yield would be greater than with our own investments. I have already talked with my colleagues about whether it might not be possible to issue securities—similar to special shares—or possibly bonds to the workers of Remix.

[Question] Science intensive production areas develop really quickly where there is venture capital, a lively flow of capital and organizational mobility. Does not a reduction in the large backwardness which can be found in our electronics require the development of determined efforts directed at producing these environmental conditions?

[Answer] First let me talk about judging the backwardness. For example, in layer-condenser or layer-resistor manufacture we are not behind the

European or even the world level and in hybrid circuits we are hardly behind...

[Question] In economic efficiency we are.

[Answer] I am talking about the technical level. Furthermore, we cannot talk about Hungary developing or even following in every area of electronics. We are too small for this. So the only way I see to develop electronics and make up our backwardness of many years is within the framework of CEMA integration. But the big obstacle to this is that not even our most primitive parts are interchangeable, and the enterprises of the socialist countries can get together only with great difficulty. The problem is not a technical one, but rather of economic origin.

[Question] As a director, do you have an unambiguous incentive to offer maximum performance?

[Answer] It would be difficult for me to give an unambiguous answer to this, but if I think that every year I get at least 20 documents containing norms, and each one is stamped "premium task," I do not believe that the content of my interest is so unambiguous. Not to mention the fact that the harmony among these documents is not perfect, to put it mildly.

[Question] As a director, would you like institutional protection for your unique interests?

[Answer] I have often thought indeed that I could be removed from this chair at any time; not so any of my subordinates. In this sense I do not enjoy legal protection, and an enterprise leader can do the least to protect his interests. I feel that responsibility and protection of interests should be better harmonized.

8984

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ROMANIA

# NEED TO ENSURE SUFFICIENT FODDER IN ALL AREAS

Bucharest ERA SOCIALISTA in Romanian No 23, 8 Jun 84 pp 10-11

Article by Dr N. Brasoveamu: "Regional Proportioning of Fodder Resources and Livestock"

/Text/ In any comprehensive treatment, the problems of regional proportioning and structure of fodder resources require regarding the latter as a subsystem connecting the two collective subsystems of agriculture, name crop and livestock production. Therefore both the methodology and the regulatory indicators for determining the areas for volume fodder crops make it necessary to base this treatment upon the connections between the two sectors of agriculture.

In the new conception of feeding livestock, aimed at minimizing the consumption of concentrates and accordingly the consumption of energy to produce them, the volume fodders are both now and in the future the main components of the fodder supply for sheep and cattle. Until very recently fodder rations with excessive doses of concentrated fodders were used, which considerably impaired the efficiency of livestock production when two-thirds of the nation's crop production was concentrated in zootechnology. The present revision of technologies for raising and fattening livestock amounts to a veritable revolution in mutritional techniques, aimed chiefly at considerably reducing the proportion of bread grains and considerably increasing that of the volume fodders, namely hay and grains and considerably increasing that of the volume fodders, namely hay and green chop from pastures and arable land planted especially in alfalfa and trefoil as well as succulents such as ensilage corn, fodder beets, potatoes, turnip tops, carrots etc.

The national program for developing fodder resources calls for a proportion of 68-70 percent volume fodders in the total nutritive units, while concentrated fodders are to be used only to perfect the rations.

As we know, in the last two decades, in accordance with world trends and because Romania is a great corn producer, development of hogs and poultry was specially emphasized in order to make up the quota of meat sooner. But now, in view of the great fodder potential (represented by 4.4 million hectares of pastures and the great fodder crops) as about 1.2 million hectares of arable land earmarked for volume fodder crops) as well as the need of making full use of the yields of the pastures and the

decision to diversify the kinds of meat and to increase the output of milk in the current five-year plan and henceforth, it is planned to increase the numbers of cattle and sheep considerably ahead of the other species. Accordingly by 1985 the total meat output is to be up about 64 percent from 1980 (the highest growth rate in the last 15 years), and it is planned to make an 87 percent increase in beef and one of 81 percent in mutton, compared with the 14 percent increase made in each of those products in the last five-year plan. This policy is also based on the fact that hogs and poultry are great consumers of bread grains, while cattle and sheep do not compete with humans in consumption of those important agricultural products.

The necessity of correlating the growth of livestock numbers with that of fodder production has a priority among the great tasks of developing livestock production. In 1965-1980 the arable area assigned to fodder crops decreased by 37 percent, while the numbers of poultry increased by 2.25 times, those of hogs by about 2 times, those of cattle by 30 percent, and those of sheep by 20 percent. It was not until 1982 that the area assigned to fodder crops slightly exceeded the area planted in those crops in 1965. We obviously do not mean a one-to-one correspondence between the growth of livestock numbers and that of the arable land planted in fodder crops, but serious consideration must be given to increasing the productive potential of the pastures and arable land planted in fodders as a result of the agricultural intensification process. But this does not imply opposite directions in the evolutions of those two factors, especially since the plan objectives call for major increases in livestock production. Accordingly we intend to analize the proportions of the fodder reserve and livestock numbers according to areas and counties for 1982.

# The Fodder Potential

This potential is expressed in terms of mutritive units per 1 hectare of arable land in volume fodder crops plus pastures. The study made estimated the fodder potential according to natural areas and counties. All volume fodder resources resources were considered in an integrated system, including secondary and residual products and double crops (components of the fodder reserve that are often overlooked in planning).

The study showed that the number of un /mutritive units/ per hectare varies with the territory from 1 to 8 times, while the values of this indicator decline from the plains areas to the mountain areas and within each natural area the foddering possibilities vary with the natural and economic fertility of the soil as expressed by the appraisal marks. The quality of the soil, the thermal capacity, and the security of the water factor are the chief technical-economic parameters determining the fodder potential of a production unit in an area. Thus the Cimpia Romana, with very high quality soils and a relatively high proportion of land prepared for irrigation, factors expressed by high appraisal marks, has a foddering capacity per arable hectare in volume fodders plus pastures 2-3 times greater than the national average. And the Dobrogea Plateau area, with relatively fertile lands and the highest proportion of irrigation, has a volume of fodder resources per hectare twice as great as the national average. Cimpia Tisei, which has a good productive potential of the soil and benefits by the contribution of ground water, has adequate fodder production per production unit but not enough to meet the fodder requirement. And the Curbura Subcarpathians and Getic Piedmont areas, with a balanced hydrothermal index, have above-average

quantities of fodders per hectare but they do not make up the quota of volume fodders. The Moldavian Plateau, with a drier climate and a high proportion of eroded lands, has a fodder potential equivalent to the national average. The East Carpathians area, Suceava County (with a high proportion of excessively moist agricultural land) and Bacau County (with some areas with severe droughts and high proportions of eroded lands) have low fodder potentials. The Transylvanian Plateau area and Salaj, Sibiu and Alba counties, with high proportions of excessively moist and eroded lands, have fodder capacities per hectare a little more than half the national average for this indicator. In the Getic Piedmont and Southern Subcarpathians the heavy, cold, watery and eroded soils also produce a volume of fodders per hectare that is very low compared with the natio-And in the area of the piedmonts and the Transylvanian Subcarpanal average. thians, with the least fertile soils and an excessively humid climate as well as limited thermal resources, most counties have fodder resources per arable hectare plus pastures plus hayfields equivalent to about half the national average. The gaps between the fodder potentials range between 17,400 un per hectare in Teleorman County (16,400 un in Islomita County, 15,900 un in Giurgiu County, 14,500 un in Calarasi County) and 2,200 un per hectare in Harghita County (2,300 un in Maramures County, 2,700 un in Hunedoara County, 2,900 un in Caras-Severin and Bistrita-Nasaud counties). In view of this situation it is important to determine the livestock density according to areas in comparison with the abovementioned fodder potentials.

# Livestock Numbers

We express livestock density by the indicator uvm per hectare /units of large stock (cattle and sheep) per 1 arable hectare plus pastures and hayfields/ and the ratio between the fodder potential and the livestock numbers by the indicator un per uvm /nutritive units per 1 unit of large stock/.

Like the fodder potential according to areas, the density per hectare of herbivorous livestock decreases from the plains areas to the mountain areas. But the ratio between the minimum and maximum densities is lower than that of the regional fodder potentials per production unit. Whereas in Teleorman County (on a plain) the density of herbivorous livestock per arable hectare in fodder crops plus pastures is 6 times higher than in Harghita County (in a mountain area), its fodder potential is 8 times higher by the same standard. Therefore analysis of distribution of livestock numbers according to areas by the uvm per hectare indicator alone, as it is usually done, conveys an untrue picture of the real possibilities of regional development of livestock production.

The data based on the livestock density indicator alone would lead to the conclusion that the numbers of cattle and sheep must be greatly increased in the hill areas and especially in the mountain zone. But the livestock density has to be compared with the un per uvm indicator in order to determine the volume of fodders that can be obtained according to areas. The values of that indicator bring out the fact that compared with the national average of 3,900 un of volume fodders per uvm, the gap is between 7,700 un in Tulcea County (6,000 un in the Ilfov Agricultural Sector, 5,500 un in Mehedinti County) and 2,300 un in Suceava County (2,600 un in Maramures County, 2,800 in Vilcea and Salaj counties).

Therefore from the standpoint of foddering possibilities the plains areas, which now have much higher densities of cattle and sheep, meet the requirements

to a greater extent at present for increasing the herbivorous livestock numbers. Application of the series of measures to improve the productive potential of land specified in the land and pasture improvement programs has a high priority in order to convert livestock production to the herbivorous species in the hill and mountain areas, which have a limited amount of fodder resources per animal. This will make it possible to considerably increase the density of herbivorous livestock in the areas with a large proportion of pastures and hayfields, since it is more economical to raise cattle and sheep on pastures in the hill and mountain areas than in the plains areas with fodders obtained by irrigated cultivation.

Priority relocation of cattle and sheep in the hill and mountain areas would also release large areas of arable land for technical crops. It is clear that in the same series of factors, irrigation of the plains areas in particular will continue to help increase crop production as a whole and especially that of bread grains, which will provide additional fodder resources to develop hog and poultry breeding.

## The Fodder Balance

The balance of volume fodders for 1982 according to natural areas and counties was based on the ratio between the fodder production capacity per production unit or the area of pastures and arable land under fodder crops and the livestock numbers. This showed that with the exception of Caras-Severin and Hunedoars counties, which have a high proportion of natural pastures and the lowest density of herbivorous livestock in the country (along with Harghita County), all counties have shortages of volume fodders as a whole even if there are surpluses of some of them (hay, green chop or succulents). The greatest shortages are on the Moldavian Plateau, which has a dry climate, a low proportion of irrigated land, and relatively limited pastures and hayfields. The Eastern Subcarpathians area of Moldavia also lacks enough high proportions in the balance of volume fodders, while the proportion of land improvement projects for the area and of pasture improvement projects is low. And the Curbura Subcarpathians and Getic Piedmont areas, which need major drainage, irrigation and antierosion operations, also fall far short of meeting the volume fodder requirement. Imbalances in these categories of fodders also occur in the northern counties on the Cimpia Tisei (whose area is especially in need of drainage operations), in the counties in the center and western part of the Transylvanian Plateau (requiring large-scale drainage and antierosion projects), and in some counties on the Cimpia Romana (with limited or practically nonexistent pastures).

Analysis of the ratio between livestock numbers and fodder production leads us to conclude that in economic practice and in planning work the predictions and evolution of the numbers of livestock come before the extent and rate of improvement of production of the fodder reserve. Accordingly it is urgently necessary to correlate the evolution of the livestock and their biologic potential with fodder production.

To this end the Program for Increasing the National Agricultural and Arable Area and for Irrigation, Drainage and Antierosion Projects makes it possible to strike the necessary balance of the above-mentioned parameters. In the course of pasture improvement operations it has proved necessary to intensify those operations

in the hill and high plateau areas, which include 29 percent of the total pasturage, and especially in the mountain and Alpine areas, which include 26 percent of the nation's total pastures and hayfields. Experiments at seven altitudes from 600 to 1,800 meters showed that improvement of pasture cultivation technologies, especially by fertilizing, increased the yield per hectare from 1,600 to 4,000 kg of dried fodder.

As for production of volume fodders grown on arable land, increased production and higher nutritive values per unit of area require improvement of the crop structure by increasing the areas planted in alfalfa and trefoil, which contribute a considerable amount of protein to the feed. This will also contribute to biological fertilization and structural improvement of the soil and to the antierosion measures.

Implementation of the series of measures to improve the crop structures and technologies would permit a regular yield of 8,000-10,000 un per hectare, as compared with the results obtained at the end of the last decade, namely 4,200 un per hectare under fodder crops in CAP's /Agricultural Cooperatives/ and 5,470 un in IAS's /State Agricultural Enterprises/. It would also bring about the necessary connections between crop and livestock production, resulting in considerable gains in production and economic effectiveness.

5186 CSO: 2700/216

# MEASURES TO INCREASE CRUDE OIL PRODUCTION

Bucharest ERA SOCIALISTA in Romanian No 23, 8 Jun 84 p 7

/Article by D. Davitoiu, technical director, Tirgu Jiu Drilling-Extraction Trust/

/Text/ Better and highly efficient production of crude oil and gases is a vital priority task of the workers collectives at the oil fields and wells. The higher party administration and Nicolae Ceausescu himself have repeatedly pointed out the necessity of increased efforts to extract additional quantities of crude oil and gases in order to meet the constantly growing demands of the national economy for raw and energy-bearing materials. This includes the efforts of the petroleum workers of the Tirgu Jiu Drilling-Extraction Trust, who contribute a considerable share of the ministry's output, namely 11 percent of the drilling, 15 percent of the crude oil extraction and 46.5 percent of the gas extraction.

In the course of its drilling activities the trust performs geologic prospecting operations in order to discover new reserves of hydrocarbons and to work them as well, concentrating on depth drilling, which accounts for more than half the volume of drilling planned for this year. In its extractive work the trust also makes rational use of the crude oil and gas deposits, and better use of the extracted gases by removing their gasoline and ethane content. In this field exploitating of depth deposits is being emphasized, and the volume of crude oil planned to be extracted from the very deep wells amounts to nearly 50 percent of the total output. All these objectives have been and still are priorities in the work of the trust and its oil fields this year, in order to fulfill the plan tasks entirely.

Since the beginning of the year the Gorj petroleum workers have extracted over 624,000 tons of crude oil and over 2 billion cubic meters of natural gases and made them available to the national economy. The Ticleni, Melinest and Tulburea oil fields have logged outstanding results in this respect, exceeding the physical provisions of the plan in both drilling and extraction. For example the Ticleni drilling field extracted over 1,100 tons of crude oil above the plan provisions by better organization of labor, in mixed brigades paid on the overall contract system, and of the production process as well, by minimizing idle time, and by keeping more wells in operating condition. This proves once again that

when an effort is made by all elements and when technological and production discipline are observed, the results are commensurate with the efforts made. Nevertheless the extraction plan was only partly fulfilled by the whole trust, due in particular to the lags at the Stoina and Craiova oil fields.

In general, the plan shortfalls were caused by a number of defects in the mechanism of labor and production organization, namely failure to maintain drilling speed (71 meters per installation per month for the whole trust), persistence of a great deal of idle time (43.5 percent at the Carbunesti drilling field and 38.9 percent at the Stoina drilling field) because of unforeseen technical accidents, lack of technical specialists, etc.

In addition there were failures or irregularities in deliveries of materials needed for drilling wells (motor oil, piping, drill bits, chemicals etc.), resulting in 20 days of waiting in the whole trust. According to one estimate, timely elimination of these shortcomings would have permitted an additional output of several thousand tons of crude oil.

In view of these lags and the particular importance of conforming to the plan provisions and producing the crude oil quota on the levels of both the trust and each particular field, the general operational programs drafted at the start of they year were updated to include specific measures suited to the characteristics of each field, with precise time limits and responsibilities. In general the main objectives of these programs are geologic prospecting and more intensive drilling and extraction in old and new deposits. The trust's geologic prospecting is in two large sites, the Getic Depression and the Moesian Platform in Gorj, Dolj and Vilcea counties, and has two objectives, namely describing and working the recently discoved deposits (Slavuta-Valuta-Stoenita-Slamnesti) and discovering new deposits of hydrocarbons in the areas of Vladimir, Bulbuceni, Also, smaller-scale operations will be executed Cocorova, Chiciora and Maru. at the North Ticleni, South Bilteni, Bustuchini and Hurezani structures. For these purposes, it is planned to perform 260,000 meters of drilling with internal forces this year, and 35 wells are expected to be activated by the end of this year at the Ticleni oil field and 72 at the Stoina oil field, which will provide for complete fulfillment of the plan for crude oil production from new wells.

In order to increase extraction and production from old wells, 1,665 technological operations with an effectiveness of 397,000 tons of crude oil are planned, amounting to a 25 percent increase from 1983. The collectives of the oil fields and the trust will analyze the technological program quarterly for the most efficient determination of measures to raise the productivity of the wells.

Continued emphasis will be placed on application of advanced technologies to drilling and extractive operations. This year it is planned to begin working wells on the dual system at the Slavuta structure, and in order to increase the yield of crude oil more intensive measures will be taken to enhance the final recovery factor by expanding the water injection processes at Bibesti, Colibasi and Virteju and to begin the injection experiment with micellar solutions at Sarmatianul VIII, Ticleni etc. Other measures are to strengthen the mixed brigades at the lagging oil fields with widely experienced personnel, to improve the system for checking production by starting to work the wells on the closed

system in the fourth quarter of 1984 and by measuring the output with automated volumetric meters, and to train the labor force better to enable them to better resolve their production problems.

5186

CSO: 2700/216

IMPLICATIONS OF CONVERTING SHORT-TERM CREDITS

Zagreb DANAS in Serbo-Croatian 19 Jun 84 pp 19-21

[Article by Tomislav Dumezic]

[Text] Conversion of credit from primary issuance will temporarily ease the position of associated labor organizations that are debtors, but in essence, their position will be changed.

The Federal Executive Council is preparing a new version of a regulation according to which part of the selective credits from primary issuance of the National Bank (credits given to economic organizations chiefly for exports and agriculture) will be converted into long-term credits to be returned in 25 years. Yet open questions still remain as a result of conflicting interests and differing perceptions. The first question: What amount of selective credits will be covered by the conversion (the original proposal of the FEC was for 50 percent of the average amount of these credits, or about 110 billion dinars)? Secondly, how can the principle of justice be satisfied in concrete distribution, since the economy has a pronouncedly unfavorable structure for operating fund resources (in practical terms it does not have its own long-term resources at its disposal, so that it is almost entirely forced to turn to accumulating short-term credits from banks and business partners), while the largest users are organizations from developed republics and provinces? Would a practical solution proposed in the debates, that organizations from underdeveloped regions receive 80 or 100 percent of the amount of selective credits, resolve the problem?

To answer that question, we will use data on the economic-financial state of economic organizations, the structure of their capital and their capital sources. By the end of 1982, the economy had succeeded in covering only 27.4 percent of its permanent operating capital with its own resources and long-term credits, while the entire remainder came from only nominally expensive short-term bank credits and mutual voluntary or forced financing. Here the state of the economies of undeveloped republics and Kosovo was alarming (the economy of Bosnia and Hercegovina covered only 13.4 percent of its needs from its own capital and long-term credits, while the figure for Montenegro was but 3.1 percent, for Macedonia it was 7.8 percent, and for Kosovo, 10.9 percent).

The situation today is much worse. Simply put, last year's inflation of about 60 percent, with an extremely capricious system for calculating total income and profit that totally ignores the melting of the economy's capital (with nominal and real values being equated), even more seriously reduced the portion of these capital resources.

Let us take just one more example. According to data from the final economic reports for 1983, the state of overall economic stockpiles on 31 December 1983 amounted to 2,090 billion dinars.

What will the value of those stockpiles be at the end of this year? If the reserves stay at the same level (in real terms), their nominal value according to the planned inflation rate of 40 percent will increase by 836 billion dinars. In that kind of situation, what objectively does the transfer of 110 or 150 billion dinars from short-term to long-term credits mean?

One thing must be clear: Measures that circumvent essential problems, that are satisfied with rummaging around in consequences, will not resolve anything important. They only contribute to a further confusion of relations in society by creating and imposing on certain false sector and regional interests a harmony that needlessly involve enormous forces and irrevocably waste so much time.

The proofs are legion. As an example, the conversion of selective credits from primary issuances of the National Bank is instructive. The chief users of such credits are organizations that conduct exports, agricultural organizations, and organizations that purchase basic agricultural commodities. Since the largest exporters are chiefly concentrated in the developed republics (and the same is true for agricultural organizations), certain bureaucratic confrontations are simply posed to the economy: first, exporters and agricultural organizations, the chief users of credits versus those other organizations, and second, the developed regions versus the undeveloped. In essence, all sectors of economy has been plucked, including those that export a lot and those that export little, those in developed and those in undeveloped regions.

The example of conversion is not the only measure being imposed on the economy and on society to form and expose essentially irrational interests. When, for example, percentages are established for price increases for individual sectors of the economy with terms for their application, it is logical that opposing interests should emerge between individual economic sectors and groups, as well as between individual republics. Regional manifestations of conflicting interests in this case are the consequences of the varying structure of the economy in separate republics and provinces. If, for example, production of raw materials and other materials will receive a relatively small price increase, then a confrontation is inevitable not only between them and the processing sectors but also between the undeveloped and developed, for as a rule the raw material sectors are located chiefly in undeveloped regions.

Let us return to the proposed conversion of credits from primary issuance of the Yugoslav National Bank. In quantitative terms, this resolves nothing, for it is a matter of 110 to 150 billion dinars, as previously noted. The fact that it is truly a matter of insigificant resources, is evidenced by data from the final economic reports for 1983. The total credits for operating capital were 1,549 billion dinars (of which short-term credits accounted for 1,101 billion), while total obligations to suppliers totaled 1,668 billion dinars.

In qualitative terms, the situation is truly incomprehensible. A conversion is proposed of only a portion of the primary issuance from short-term debts of the economy, which will become long-term credits. The core of the debtor-creditor relationship remains. The debtors are economic organizations, while the creditor is the Yugoslav National Bank or the state. A remarkable relationship, in which the state is the owner of capital. It is even more remarkable that the state is not prepared to "relinquish" that capital to the economy, but is ready to accept its melting away through delaying repayment and increasing the repayment period to 25 years, with minimal interest that will cover only a symbolic part of inflation. That fact, which says that the state is not behaving like the owner of capital, nevertheless does not change the essence of the relationship, for it is at least the quasi-owner of quasi-capital.

Where does the state get capital? Naturally, there is no real capital. It is simply a matter of blindly arranging (with great delay) monetary policy around inflation. In our case a truly virtuoso transformation is at the center. Instead of appearing as by far the largest domestic debtor, the state has become the creditor, at least of this quasi-capital. Why is the state in reality a debtor? That status does not emerge only on the basis of deficit financing of the federal budget, although a portion of this source is not to be underestimated, for it is the debtor for all the budget income that is not based on actual income from taxpayers. And there are truly many such parties. To what extent are the increased incomes of organizations and individuals unjustifiably large due to the transformation of part of foreign exchange into domestic consumption? To what extent is the increased income of economic organizations (and their employees) distorted every year due to tricks played with exchange rate differences? How much income is created by the system of calculating total income and profit that merely forces the operating capital of economic organizations to be transferred into consumption? Taxes and contributions must be paid on such inflated income. In fact, all of these items should be domestic state debts. Moreover, the debt based on unrealized income spent by economic organizations and by individuals should also be state debt. This is because all systemic decisions are approved by the state, which is responsible for their functioning. Every rational economic system must be based on this principle: No subject can, without adequate economic consequences, spend above its available means. Only the state has the privilege of being an exception, but use of that privilege must have as its consequence a state debt.

Can more capital be returned to the economy? The answer is certainly affirmative. Those 110 or 150 billion dinars mean nothing in the face of 40 or 60 percent inflation and the need to cover stockpiles of raw and other materials, production in progress and finished products and goods, which in terms of the erosion of money alone assure the need for supplemental monetary resources of between 800-1,000 billion dinars annually.

Naturally, we cannot avoid the eventual influence of that new initial money issue on domestic price trends, in other words, on inflation. It could be asserted that no new money issuance is in question. There is simply the need to coordinate the flow of goods and money that today are markedly disrupted, at least where economic organizations are involved. That is the consequence of a completely erroneous policy for stopping inflation. When, on the other hand, we speak about the private sector, the situation is completely reversed. Here are the owners of capital (individual citizens' savings accounts, both in dinars and convertible currency, totaled more than 1,300 billion dinars), capital which nevertheless goes largely for consumption and in practical terms does not exist. These owners count on their capital, and in the not too distant future it will cause a frightful inflationary blow with all the accompanying social and political consequences.

That the relation between goods and money is disrupted in the economy is proved by the totally disrupted structure of operating capital sources, mutual crediting and lack of cash flow. Sufficient proof of that is found in comparative data on trends in inflation and the money supply. Restrictions in the realm of monetary policy have not yet borne the fruit of reduced inflation. Rather, the results of that policy are of an entirely different sort; they are the growth in mutual financing arrangements, credit documents and cash flow difficulties.

These facts are used to defend the failure of the restrictive credit and monetary policy. Supposedly the restrictive policy of the money-issuing agency cannot bear fruit when nearly every organization issues quasi-money. Naturally, that is inaccurate, but it certainly coincides with the prevailing concept of economic policy, which simply proclaims certain visible consequences to be the causes and establishes economic policy measures accordingly that yield results consonant with their quality (a result that could not be avoided). What are the causes? The answer is consumption, formed quite autonomously when we speak about both the state and social activity organizations, and in the organizations that make up the economy. Let us attempt to review the basic causes of inflation, using a crude quantification. No one would dispute that uncovered losses form one cause of inflation. According to the final reports for 1983, the economy had current operating losses of about 117 billion dinars. Of that, some 80 billion was not covered. It is clear that those 80 billion dinars exerted pressure on the supply of goods through paid personal income, taxes and contributions (for personal, general and mutual consumption), which contributed significantly to inflation.

The other sources of losses are not so clear. The accounting system contributes to concealing them by unrealistic reporting of the status balance and success balances of associated labor organizations, by unrealistic presentation of obligations and demands at commercial banks, unrealistic budgets of sociopolitical communities and unrealistic balances of national banks.

Major losses are incurred daily on exchange rate differences, but such losses are not reported anywhere. Rather, they are simply recorded in temporary restriction accounts. Negative exchange rate differences on foreign investment credits for equipment used by economic organizations can somehow or other be reconciled. Revaluation of equipment that has been acquired on

the basis of convertible foreign exchange indebtedness can accompany exchange rate differences. Another question is the future viability of operations by those organizations that will have to build all those exchange rate differences into the prices of their products by amortization. The problems of exchange rate differences are much greater on convertible currency debts where the commercial and national banks are required to make repayments. The fact is that the credits have been spent, that the user owes a dinar amount at an exchange rate that was 50 to 80 percent less than today's. The same thing applies to exchange rate differences on the convertible currency accounts of citizens.

Structure of Sources of Operating Capital

Percentas	es :
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	31 Dec 82	31 Dec 83
Permanent Operating Capital Sources	41.6	38.5
Pooled capital	1.8	2.0
Long-term pooled capital	1.6	1.7
Short-term pooled capital	0.2	0.3
Total Credits	22.9	22.4
Basic Capital credits	10.9	10.7
a. long-term	10.7	10.5
b. short-term	0.1	0.2
Operating Capital funds	11.3	11.1
a. long-term	3.2	3.2
b. short-term	8.0	7.9
Credits for pollution control	0.7	0.6
Obligations to suppliers	11.1	12.0
Obligations based on checks and notes	5.5	5.2
Other obligations	5.6	6.8
Obligations for advances	4.5	4.8
Other commercial obligations	2.7	3.3
Obligations from income	2.2	2.5
Obligations from stopped tax and		
contribution payments	1.0	1.0
Capital in accounting procedures	8.6	8.8
Passive temporal restrictions	3.6	4.7
Total Sources of Operating Capital	100.0	100.0

Structure of Committed Operating Capital in the Yugoslav Economy

# Percentages

	31 Dec 82	31 Dec 83
Money and valuable paper (except		
checks and drafts)	8.5	7.7
Current Accounts	4.0	3.0
Convertible exchange accounts	2.6	2.9
Other monies	1.6	1.6
Valuable paper	0.3	0.2

Accounts payable	23.7	24.1
Covered by checks and drafts	11.6	10.5
Covered by guarantees and promises	8.1	9.0
Uncovered accounts payable	4.0	4.6
Demands for advances	7.1	7.4
Other demands	1.7	2.0
Total reserves	31.6	30.7
Raw and other materials	13.7	13.3
Semifinished production	4.7	4.7
Finished products	3.8	3.7
Stockpiles accepted from producers	0.9	0.9
Goods stockpiles	8.5	8.1
Remaining Operating Capital	27.4	28.1

In order for the state to repay its foreign debts and pay interest on them, it must have some profits. But the state has no such profits. It appears as a purchaser of convertible foreign exchange in the money market (in practical terms, the Yugoslav National Bank acquires the convertible foreign exchange on the basis of currently effective criteria). The foreign exchange is paid for at current exchange rates. At best, however, the state can actually collect on only a small part of that capital. The exchange rate differences for financial credits, which amount to about 10 billion dollars, last year totaled more than 500 billion dinars. Economic organizations as a rule are not the debtors for those credits, and precisely for that reason the exchange rate differences cannot be transferred by revaluating basic capital. Those expenses should be borne by the Yugoslav National Bank, the republic and province national banks and commercial banks. Exchange rate differences should be covered exclusively from the earnings of suitable sociopolitical communities (as a budget expense) and from the earnings of commercial banks. Since that is impossible in practical terms, a solution has been found that accommodates everyone: The exchange rate differences remain charged to the corresponding temporary restriction accounts and will never ever be covered. In practical terms, all that uncovered consumption represents inflation, without regard to the fact as to whether it is covered by corresponding issues of money.

In quantitative terms, the second by degree most important cause of inflation is the system of accounting for total earnings and incomes in associated labor organizations. Since the present system uses the equating of nominal monetary value with real value as its point of departure, practically every year the income of economic organizations is unjustifably increased by 400 to 600 billion dinars. All of those resources are transferred into general, mutual and personal consumption (by unrealistically increased taxes and contributions and unrealistically high personal incomes).

The stated and actual income of the economy should be reconciled by a realistic expression of total earnings and incomes, by covering exchange rate differences using current operations and by covering expressed current losses at the expense of the properties of organizations. Naturally, both income as a whole and all of its parts would be far less. All forms of consumptions would be drastically reduced. The question is only which systemic instruments and current economic measures are to stimulate economic subjects to a greater volume of production, higher quality economic operations, more rational division of labor and more effective integration into the international market.

12131

# EFFECTS OF ECONOMIC CRISIS ON NIKOLA TESLA PLANT

Zagreb VJESNIK in Serbo-Croatian 20 Jun 84 p 5

[Article by Vlado Rajic: "VJESNIK on the Scene at the Nikola Tesla Plant: How Do You Tell Someone He is Surplus?"]

[Text] The Zagreb telecommunications equipment plant was the first to decide to make the latest digital exchange offices and to encounter worker perception of being threatened by the computer chip.

What are all the questions which workers at the Nikola Tesla Telecommunications Equipment Plant may ask?

There are a great number of them, very important question. They asked them in fact during the work stoppage, despite all the regular self-management and political work, first in two and then in three organizational units. The first time about 100, and the second just as many workers demanded that they be given answers to certain major questions in a subject which it would be difficult to define precisely. The first question is that of the rise in the cost of living in relation to individual incomes. The point is not merely the social status of workers. The question is rather how can a unit with exports of 170 million dollars over the last 3 years, which obtained no foreign exchange credit until 1982 and did not receive a dinar of investment assistance from a bank before 1980, be unable to provide individual incomes higher than the controversial workers' share of 12,000 dinars.

"I am certain that nothing would have happened if the pay for April had matched these steep price rises, but when a person compares his 12,000 dinars with the costs of housing, electricity, water, and everything else, then he looks for an explanation of why he is receiving so little for a month's work and wonders how he will stretch it to the next payday." These are the words of Vjekoslava Sivak, a worker in a department that has been shut down and a member of the union executive committee in labor unit 630. The controversial pay is explained by Josip Djuzel, chairman of the union conference in the labor organization. April is a month in which it was possible to work 13 percent fewer hours than usual. Hence the revenue was that much smaller, as were also the individual incomes. A full explanation is obtained from the chairman of the labor organization managing committee, Marijan Crnjak. What he told us is an integral part of the report given in January 1984 to the chairman of the municipal assembly and to the community economic committee. The report states that the

Tesla Plant has been export oriented for some time now. This means that technology has been adopted which is in a class with the world's best. This means that a team of 700 topflight specialists in all fields are employed in development. This means that owing to decline in the growth of fixed costs series production has been required, that it has been necessary to sell output to a large market, that in order to remain in this market it is necessary to adopt new production, and in order for this production to be efficient according to the criteria prevailing throughout the world it is necessary to carry out complete personnel retraining.

Drnjak says that all these plans and programs are known to every worker, and that the plans have been thoroughly discussed by worker councils and at the meetings of political organizations and assemblies. Everything has been adopted and accepted. To be a worker at the Tesla means to love one's collective, but....

An integral part of these reports has been represented by the item relating to the technological surplus. And this has been known to the workers, precisely this hard fact that a large number of workers in their collective are expendable. They have also known of programs of gradual employment of surplus workers in substitute programs and transfer to other collectives in Zagreb, some temporarily and others on a permanent basis, all of them on the volunteer principle, naturally as long as there are volunteers, and then according to a certain scale.

### Agreed on and Adopted

And this is not all. For several years now the economic crisis has influenced all plans and programs. The ban on equipment imports has been in effect for 3 years. Crnjak says that we have lagged behind in development over these 3 years. We have lagged behind in accompanying programs, since the economic distress has also affected this part of our very precise plans whereby we wanted to avoid exactly what has happened, so as to insulate people from the shock and enable them to survive collision with the fact that they are surplus in their own factories. To put it simply, in view of this impact on production and the problems connected with keeping production at the level reached, it is not possible to provide the additional 450 million dollars which these 600 surplus workers cost. During these times of layoff the workers have been asking why the technological surplus affects only the workers. Why is there no reduction in the points for work brigade leaders, only direct production workers? In addition there has emerged the unfailing sign of distrust of immediate superiors. People from the managing committee have spoken with the workers at meetings, and about what? About the same things already agreed upon and adopted. But now they face workers who are directly affected by reduced personal income in all their private and family plans. Consequently, the question of trust in the activists of sociopolitical organizations, management, and the members of self-management organs is a serious matter.

## Always Brief

"It is a problem of information. We have newspapers, bulletins, and public announcements, but people demand the living world. I hear everything and write everything down; I want to pass it on to the workers, but it doesn't come off. I am asked what I know about things. They think that I am not capable of passing on the information they need," says Vjekoslava Sivak. Nada Zelezic, a member of the union committee in labor unit 622, links the distrust to the phenomenon of technological surplus.

And Director Crnjak, being asked why it is so difficult for people to meet members of the managing committee and have them explain by speaking directly, replies, "it isn't difficult but it is illogical. You see, we have the labor organization managing committee, the basic associated labor organization managing committee, shop chiefs, section chiefs, and managers, andtat the bottom of this hierarchical ladder the brigade leaders. Under this arrangment of matters, in an economic situation in which every specialist is important to us for the overall functioning of the collective, it simply is not necessary precisely for us to come forward. This would be equivalent to going beyond the entire stipulated information system."

Nada Zelezic believes that people have not been prepared for facing the fact that they have to leave the Tesla because of the surplus. Branko Ocic, a member of executive committee in the production basis associated labor organization, says that in 1983 the workers began to be prepared for this fact. They were informed of this when the new development plan was announced. But no matter what is done, any period set for announcing layoffs due to the surplus is too short, even a year and a month. Djuro Mesic, the chairman of the ONO and DSZ committee at the Tesla, calls our attention to the fact that the normal annual variation of about 300 employees at the factory ceased when the economic difficulties appeared.

What the Chip Can Do to the Worker

Branko Safarik, a highly skilled toolmaker, shows us two pictures hanging on the wall of the room in which we are talking. One of them shows a small plant building, and the other the modern factory evolved out of this building. "This could be done when things were better throughout the country. Now it is impossible even for Tesla to extricate itself from all its problems and for things to take a turn for the better for other plants." Director Crnjak says about this sharing of misfortune that "if this economic crisis was not occurring throughout the country, all this happening at Tesla would not be so dramatically pronounced. But we can say that all of us are somewhat responsible for this situation. You see, when Tesla rejected the tactic of obtaining credit and used its own money to build its future, many people told us that this was not a sensible thing for us to do. Tesla was the first to decide to begin production of the latest digital telephone exchange offices, and Tesla was the first to sense the danger which the chip represented for the worker."

We notice that in the entire situation special reliance is placed on the conscience of the workers who have already been declared surplus or are waiting to be so declared. Stanko Sternak and Eduard Pucko, chairmen of the SAK in the labor organization or the production basic associated labor organization, have an answer ready for this comment. "It's not correct to say that anyone is being forced out of the collective so that things will be better for those who stay.

We have discussed and clarified all this, and we have all reached agreement on this. Of course, when the first group of workers was transferred to other collectives, we were all shaken."

The workers asked during the work stoppage why new people are constantly being hired in the labor collective and the research and development basic associated labor organization. Director Crnjak has an answer to this question as well. "By no means is it our plan to reduce the number of workers employed directly in production by introducing modern technology. This is the pattern throughout the world. But it is also a fact that the labor collective is not a kind of office worker's oasis as is often believed. It is an assemblage of exceptional specialists, and we will need many more of them than we currently have if we want to have first-class technology accompanied by first-class marketing, procurement, sales, and the like."

Josip Djuzel pointed out to us that we have missed a very important detail in this entire story. It is a question of the cause and immediate occasion of the first stoppage, lower personal incomes. But it was necessary to respond to all this by taking measures as promptly as possible. It was proposed that a part of the money be allocated in accordance with a special criterion and be used to form a fund out of which the persons receiving the lowest wages would obtain some supplementary income on the solidarity principle. This would raise the minimum wages about 2,000 dinars. However, in response to this solution, at the beginning of June there was another stoppage, this time among workers who were already receiving individual incomes at the level which would be reached in accordance with the proposed solution also by those who would have been entitled to the solidarity supplement.

Djuzel says "it would be difficult to determine what the minimum is, since there is no social map, and the workers (knowing each other) objected to parting with some of their share for persons who work less or who already live better than they do. The most definite demands were those of the machine shop workers, who proposed that the solution be adopted, not for them but for 'the people upstairs.'"

Much hope, we heard in the conversation, is placed in the analytical evaluation of operations and tasks to be made by fall. It should differentiate work obligations with much greater precision than in the past, and a wage distribution system will be elaborated on the basis of it.

#### This Is What Happened

We ask what lessons have been learned from all these events. First of all, says Vjekoslava Sivak, stoppage is no longer talked about among the workers. It has been agreed in section 630 that the arrears resulting from the stoppage will be made up by means of increased work, and if necessary by additional hours. In addition, discipline in observing regular worktime is such that it has permitted significantly exceeding output. Nada Zelezic adds that in her worker environment the workers want to forget all past events as soon as possible and work as much as they can to support their collective firmly.

Such is the situation among our workers. As a matter of fact, it is possible that gossip about what in reality is happening beyond the plant gates will very soon begin to circulate as information on the events at the Tesla. Many people with "firsthand knowledge" are also appearing. And then the news is too late. And then something else is too late and here is a convenient train which many people can board. While in reality... "Even when the workers demanded a meeting with the management for the first time, we termed this meeting a stoppage," said Josip Djuzel. "Is it really stoppage when persons ask that someone explain something to them, even if they ask it more vehemently than is necessary?"

"We were on the scene, talked, and took notes. There was talk without too many big words. This happened because in some cases we had been formalists and should not have been. It happened because interpersonal relationships in some environments were disrupted, because the times are hard, and because it is becoming harder and harder to make ends meet. It happened because there is no sociopolitical work of sufficiently high quality for development and advancement of self-management, because of the worsened business conditions, the ban on equipment imports, the increased amounts withheld from income, and the growth of interest rates and inflation. There have been many guesses as to what happened at the Tesla. This is what happened.

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CSO: 2800/376

YUGOSLAVIA

#### ASSEMBLY CHAMBER DISCUSSES SMALL-SCALE ECONOMY

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[Text] Belgrade, 19 Jul (TANJUG)—Small-scale economy represents a major theme and one of the strategic areas of our general development in the next period. It occupies a special place in the documents on the long-term economic stabilization programme, Rade Pavlovic, member of the Federal Executive Council, stated at the session of the Chamber of the Republics and Province of the SFRY Assembly today.

Among the numerous aspects of small-scale economy's importance particularly noteworthy are the influence of the small-scale economy and its possibilities for structural changes in the country's economy; more rational use of all the economic potentials; possibility of reducing the economy's dependence on imports; and the small-scale economy's other effects in the light of the attained level of development, especially in today's exacerbated conditions of economic activity.

Particular stress is laid in this connection on the great scope for employment in this field. According to some estimates by experts and research institutions, the creation of conditions for the accelerated growth of the small-scale economy could result in 1.5 million jobs according to some and over 2 million jobs according to others being available in this sphere within a relatively short period of time.

The soundness of these assessments can be appreciated if one bears in mind that in the most highly developed countries small production units account for over 30 percent of the production program of the whole economy. The experience of industrially developed countries shows that almost limitless possibilities exist for the development of smaller production units which are involved in major and complex production processes.

According to the situation at the end of 1982, the small-scale economy accounts for about 10 percent of the total number of people employed in the country's economy and for about 5.7 percent of the total social product. Out of the total of workers employed in it, which is 507,361 workers, 62 percent are in the private sector and 38 percent in the social sector. The structure of our small-scale economy comprises 2,605 organizations of associated labor, 135 contracted

organizations of associated labor, 378 artisan cooperatives and 209,058 self-employed.

Despite the significant results achieved in the development of small-scale economy as compared with the economy as a whole, in particular the 4 percent growth of production and employment, the attained level of development of small-scale economy is insufficient, so that its capacities fail to meet the demands of the economy and the population at the present stage of the country's development, Pavlovic stressed.

In small-scale economy it is possible to set up the kind of production facilities and production series which represent a harmonious addition to the major industrial and other capacities needed for production in large series. Small economy facilities make it possible to use social resources more rationally, while the setting up of a large network of small organizations in the field of production and service activities enables such organizations to be more responsive to the effects of the market and adapt themselves more easily to the demands made by the market.

The development of small-scale economy should be seen as a strategic question of the whole of our develop policy, not only with regard to the current and next periods of the plan, but also on a longer-term basis. This is why we cannot be happy about the disproportion between the multitude of documents, attitudes, and orientations and our needs and possibilities, on one hand, and on the other the slow rate at which the process of accelerated development of the small economy is taking place, often against resistance, especially in the case of development of independent personal labor funded from resources owned by citizens. Any enrichment which is the result of work should be encouraged, while special policy and inspection organs should be used to suppress any possibility for acquisition of income not based on the results of work.

There is no doubt that the sociopolitical communities, from the local community through municipalities and republics and provinces up to the federation, exert an important influence on the creation of the conditions needed for the more rapid development of small-scale economy, but it should be stressed that they cannot be the exponents of the program of development of small-scale economy. This can and must be done by associated labor in the so-called "large-scale" economy, which, in its own interests and in order to involve the former in its own development process, should prepare a concrete development program for individual activities in the sphere of the small-scale economy within the framework of both associated and personal labor, with established sources of funds and other conditions needed for the realization of these programs. On the other hand, the sociopolitical communities should make possible the appropriate development of the small-scale economy by means of its taxation, land, investment, foreign exchange and customs policies, and other stimulative measures.

We must stress that when we are proposing measures, especially those which concern the conditions for economic activity in the sphere of personal labor funded in full from citizens' own resources, we have in mind the particularly

important attitude and orientation in the long-term program of economic stabilization with regard to the small-scale economy, which lays stress on the need to ensure for the small-scale economy and appropriate place in the economic system which will be in keeping with its economic capacity and possibilities and have a stimulating effect in the direction of its considerably more rapid development on a lasting basis. In this connection, the need is also stressed for the equal treatment of the small-scale economy in the fields of associated labor and personal labor funded by resources owned by citizens, as well as for the acquisition of an equal status for this branch with regard to the conditions of economic activity.

CSO: 2800/410

CONTINUING DEFICIENCIES IN INVESTMENT PRACTICES NOTED

Zagreb START in Serbo-Croatian No 399, 5 May 84 pp 36,38

[Article by Miodrag Sajatovic: "New Investments Using Old Methods"]

[Text] Investments in commercial projects and structures have not always been the result of well thought-out investment policy, even recently. Many examples indicate that even now, basic documentation and construction permits are too often lacking, raw materials have not been provided for, no funds exist for completely equipping an installation, capacities are unnecessarily duplicated. Why is this so, in spite of everything that has been said about investment policy until now, and what can be done to put an end to these practices?

After many years of discussions and resolute calls for "carrying out investment projects within realistic limits," only during last year were the number of completed investment projects in Yugoslavia greater than the number of cornerstones laid. The examples of factory installations completed this year are proof that excessive investment in the construction of new projects is really only one part of the reason—and a smaller one at that—why one in every eleven basic organizations of associated labor loses money today, why the interest on loans taken out by businesses (396 billion dinars) is greater than the total amount of money set aside by these same business in accumulation, and why unpaid loan claims have gone over 1,600 billion dinars.

Recently, after 8 years of construction, the production of polyethylene was begun at the Dina petrochemical plant on Krk. What should perhaps make one even happier about this is that, in spite of all its problems, Dina did not suffer the tragic fate of the completely failed investment projects such as Jadral in Obrovac, or the Mediapan factory near Kraljevo. Dina's prospects are to some extent brighter than the future of the enormous Feni ferronickel plant, located near Kavadarci. Several months have already passed since the announcement came from Macedonia concerning the preservation of Feni, and now the Presidium of the republic conference of SAWP has prolonged the agony, similar to what took place at Obrovac, with the decision that they will again consider the pros and cons of the project by June.

Nevertheless, the uninformed might perhaps think that everything is in order now, as raw materials from Krk have arrived at the 7 July factory in Presevo, and deliveries from Osijek are now expected at Analit, at 17 November from Orahovica, and at "the other organizations of associated labor which signed a self-management agreement with Dina on the matter of association." But in our country, a completed investment project often does not mean the end of large-scale worries and problems, but the beginning, and so even the dimensions of Dina's success remain unclear.

Thus, for example, it was announced during the middle of January of this year that the largest Yugoslav tire factories had received their first delivery of synthetic rubber manufactured in Elemir, near Zrenjanin.

This was taken to be the beginning of "repaying the debt" owed to Yugoslav tire manufacturers who had invested a good portion of the money to construct this, the first Yugoslav synthetic rubber factory. Although it had been shown that the domestic rubber was first rate, that the choice of technology was surprisingly good given the conditions in our country, and that it would be possible to replace imports with this rubber, nevertheless, the Elemir factory is, in a way, a failed investment.

The Rekord plant in Rakovica suspended purchase of rubber from Zrenjanin after only a few days and continued importing as it had done previously. Statements from Tigar and Borov said that much had been expected from the new factory, but that along with the rubber also came a high price and the demand for foreign exchange participation, the result of which was that the import was 20 percent cheaper! Whether by coincidence or not, several days later the production of tires at Borovo was halted "until the existence of a disparity between the prices of raw materials and finished tires is resolved."

The workers at the Kauchuk plant in Elemir responded that they are not to blame for the fact that the construction wound up costing so much, that exchange rate differences have increased, that large debts have piled up, that it needs foreign exchange in order to import certain components... In passing, they decided to take a militant stance with the assertion that no one can force them to produce losses. "If the domestic tire makers don't want our product, we will sell it on the foreign market," say the producers from Elemir.

The case of the Vartilen plant in Varazdin shows that this is not an isolated example, and that we should try to figure out what product deliveries from Dina really cost. Vitally interested textile workers also associated their resources to construct this plant in the expectation of having a substitute for imports. When the factory was completed, the first production quantities of polyester fibers were accompanied by much pomp and ceremony. They were sent to ZIVT in Zabok, where they were welcomed with the belief that the money invested would begin to be returned many times over.

But for the most part, Vartilen is not in production today because authorities at the republic level "forgot" that at the same time as the plant was being

constructed a factory for making raw materials necessary for the preparation of polyesters should have been built as a part of the Sisak petrochemical plant. Not even the cornerstone for such a factory in Sisak has been laid up to now. This forgetfulness affects those 25 organizations of associated labor which associated their resources in this undertaking, and Varteks does the worse because it is responsible for carrying the investment, and the associated resources. Because of Vartilen, materials for reproduction now cannot be procured for the regular production of coarse fabrics and readymade clothing even for other SOUR components. The practice of giving workers a "compulsory vacation" has become more and more frequent, and has been the only solution here on several occasions.

Carelessness in the construction of all necessary phases of the industrialization process is not all that uncommon with "investment mania." In Crna Trava, one of the least developed opstinas in Servia, a factory making steel fasteners "fell apart" because the foundary had still not been completed in Leskovac. This fastener factory was formally opened during the middle of last year anyway, although neither the equipment nor the documentation had yet been completed.

At the end of January of this year, a ferrosilicon factory in Dugi Rat was formally put into operation. With the pouring of the first quantities of ferrosilicon, the Dalmacije collective marked a notable anniversary—its 75th year of existence. When the celebration was over, production stopped. Actually the project was technically finished back in September 1983, but because of restrictions in the use of electrical energy, production factors had not yet been tested, planned, and guaranteed. Otherwise, final production should have been exported to convertible currency markets by now. A revision of the investment program is in progress, and it is expected that additional expenses will total 550 million dinars.

We conclude this survey of the fate of investment projects underway with an example from Ohrid. The local construction firm Trudbenik made an effort to construct a shop directly on the route of the future highway between Bitolj and Ohrid. This was done without a permit, of course. The project must be torn down, and the Ohrid Opstina Assembly paid Trudbenik 10 million dinars for damages. It's really a pity that there are no more highway routes like this...

Bisera still has quite a lot as well as investment projects which are underway. It spent the first few months of this year acquiring factories from a chain of detergent producers. For years Bisera produced raw materials for the production of detergents in Prahovo. Now they have decided to improve poor financial results by expanding production into making the final, and obviously more lucrative, product. By the end of the year they should have installed equipment which will produce 7,000 tons of cleansers a year. Perhaps this will be a solution for Prahovo, but when this output is added to that of the new Merima plant in Krusevac, which will soon begin operation, it will mean that Yugoslavia's total capacity in this area will be 100,000 tons over its

needs. A solution might perhaps have been for Prahovo chemists and the existing producers of detergents to have worked together, but there seems to be no interest in this.

Practice confirms that no power can stop construction once it has already begun; an example is the oil refinery in Bosanski Brod. Although the oil workers cannot even come to an agreement concerning existing capacities, and the Federal Executive Council cannot portion out the necessary raw materials, they are not thinking of conservation on the right bank of the Sava.

Construction continues, and the deadline has been moved once again, this time to the middle of 1985.

"What we are building now is a replacement for the existing, worn-out installation," the workers in Bosanski Brod claim, and the redundant, recently completed refinery in Novi Sad also serves in its own way to give them an alibi.

Residents of Novi Sad are again defending themselves because of data which indicate that during the last 6 months, a meager 87 investment projects underway out of the approximately 20,000, have been suspended, and these are mostly ones of little consequence.

Thus, for example, in spite of restrictive regulations and bans on uneconomic investments, the Ljubljana Bank is building a large new building.

The delegates of the Opstina Chamber of the City Assembly of Ljubljana received an answer to their "arrogant" question concerning who had approved this project and when, and why the construction had not been suspended. The answer was that everything was legal and in order, and that "questions which had been raised had been completely explained." But what had been explained was only that in one half of the building there would be a center for automatic data processing, and in the other half, "other banking activities." The building will, of course, be completed, and the delegates are now fighting that these business offices be used for productive business activities and not for housing administrative functions.

It's another story with equipment. Investors are able to raise walls and put up a roof, but it is a little harder to get imported equipment. Due to lack of approval of the import of part of its needed equipment, the experimental production in the Gorenje refrigerator factory in Bihac, scheduled to begin in October of this year, will most likely be postponed.

These are also identical problems in Suva Reka, where they are supposed to complete a damper-tire factory. Although Kosovo has the most losses compared to revenues in Yugoslavia--mostly because of failed investment projects--it is claimed that the projections for this factory on the operation of the future collective indicate it is economically justified.

Looked at on the whole, investment projects have indeed been declining in number recently, but this is not the result of a conscious, selective approach, but of the tight purse strings of the banks and the impoverishment of the economy. Losses, illiquidity, and other problems barely allow for investment in simple reproduction, and for the most part there is no money for expansion. But subsequently there have been no shifts in investment practice of an essentially more qualitative nature. There are still too many uneconomic investments even now, and even the small percentage increase in commercial projects under construction is the result of fewer investment projects in housing construction. Subsequently, mutual investments between republics and provinces have also been reduced. According to data from last year, only 33 million dinars of every billion invested in the construction of new projects crossed republic and province borders. They have also not adequately invested in the priorities established by the plan for 1981-1985 (which has, to be sure, now been suspended), and exceeding the time periods allowed for completion of projects, as well as exceeding preliminary estimates of the value of projects, are regular occurrences.

In the meantime, a new factor has appeared. According to recent data from the Croatian Assembly, "the present level of investment is at the lower limit of acceptability, and any reduction in this level might have long-term negative effects on further development." With this in mind, under conditions in which the "room to maneuver" grows smaller, who knows what has been undertaken in the way of actions to check investments in progress.

Although experience indicates that such actions have a limited effect, it is apparent that something must be done. In this critical economic situation, every dinar invested in any given activity will have to be invested to get a quicker return and greater results.

The SFRY Presidum has even warned recently of "the responsibility of all social participants to make the most rational use of social accumulation as possible, considering the meager means available for investment and the urgent needs for deeper structural changes in the economy. We must very quickly abandon the practive of rudimentary and irrational investments."

It has become apparent that the most pressing need to be addressed is in finally finding correct, objective, and reliable methods to use in evaluating the significance of making a new investment. Each republic and province has set up criteria by now which must be satisfied by a project to get the green light. The quality of these criteria is indicated by the fact that all projects have passed through this alleged filter up to now, and they continue to do so.

At the present, when inflation is increasing, when the dinar is falling in value and exchange rate differences are increasing, when interest rates on loans are climbing at a dizzying pace, and when the economic picture in general is markedly distorted, the criteria to use for investing are more confused than ever. It is almost impossible to evaluate what might happen in the future, and this ability is a very important element in effectively selecting investments. The easiest thing to do would be to wait for the long-range program of stabilization to be carried out, and then for criteria to be used in investment decisions to be established. Unfortunately, this is a utopian expectation, because the only thing to do under these conditions is to modify policy as we go.

"With the development of a system of expanded reproduction, a mechanism is to be worked out for the social verification of investment decisions from the standpoint of evaluating the social and economic justification of an investment, and a system of public notification and documentation of investments is to be perfected." This was written in the Social Plan for Yugoslavia 1981-1985, mentioned above. Three years later, the SFRY Presidum emphasized that it is necessary "to have a social agreement concerning unified methodology for ascertaining the social and economic justification for intended investments as soon as possible." Obviously, nothing has been done since then. In the meantime, the republics and provinces have attempted to work out their own prescriptions.

In the Socialist Republic of Croatia, for example, they are presently insisting on speeding up the procedure for changing the law concerning the provision of funds for building projects. They are seeking to provide not only for an obligatory evaluation, but for verifying that evaluation. The Economic Institute in Zagreb has proposed a concept and a model for evaluating investment programs, and the Economic Council of Croatia is working on this intensively.

Among other things, they are proposing that the evaluation procedure for intended investments consist of an obligatory verification of both the idea and the analysis of the project which the experts have given to the investors. They stress that the question of such help, which would be given at "evaluation centers," would not bring about the presence of a positive trend of effective resource investment instead of one going in a negative direction.

In the future, only "authorized planners of investment programs" (will the many who have also been proved to be "experts" be awarded this title?) will be able to give an evaluation and to verify an evaluation, and before this takes place, specialized education and advanced training will be provided for. One should say that the verification, tied to the so-called complex investment programs, would not be obligatory, but would influence the potential builder with the force of its convictions and arguments.

But one should not forget that in order to invest rationally, in addition to decreasing the voluntary contributions of various "informal groups," it is most probably necessary to reinforce scientific research work in the area of finding optimal programs both according to material (technical-technological) and financial criteria. And unfortunately, this is a long-term job, all the more so because relative outlays for total scientific research work amounts to approximately one percent of social product, far below the average in other countries.

When talking about the agreement on mutual criteria for the whole country, which was mentioned above, it has been proposed, among other things, that basic criteria be established which would have the role of elimination and selection. This means that one should no longer be allowed to carry out the

construction of capacities which have the same or similar characteristics as those already in existence, which are not being used to a minimum level of plant utilization. Construction projects whose analysis and verification revealed that they cannot be guaranteed the appropriate energy and raw materials, etc., would also be eliminated. Selection criteria might include, for example, foreign exchange and dinar effectiveness, or the level of association of resources.

The problem of coordinating investments is unresolved. Between 1975 and 1977 there was a law on the recording of investments. Now we are again concerned with this job— the Social Agreement on Recording Planned Investments has been adopted in order to take again the beginning steps in development through necessary and obligatory notification concerning expanded reproduction.

If this type of notification were to be developed, we probably would not have as many refineries or Mediapan-Ploca factories as all the rest of Europe.

Perhaps we would also not get the sort of incident we had with the construction of the Falko aluminum structures factory in Ivangrad. After 5 1/2 years waiting for the decision of the bank and five different variants of the construction project, the citizens of Ivangrad have been left without a factory. True, they got together 14 prominent scientists, specialists, merchants, and competent experts on aluminum production, who signed a statement saying that "the plan of the Falko program provides for pssitive management and timely repayment of all loan obligations." Several days before the meeting in the Titograd bank where the final decision was to be made, the economist Bozo Kovac appeared in POBJEDA (you guessed it, he was not one of the 14) with the warning that it was necessary to check out the Falko construction program. "We should seriously consider the balance situation with regard to the production and use of aluminum," Kovac wrote, considering that with regard to the energy situation and for other reasons, there will be less and less aluminum.

Delegates of the Titograd Bank Executive Council ultimately voted against supporting the construction plan. Those in Ivangrad responded with an official announcement about the mount of misinformation. They were bitter about the articles in the press which "generally and subjectively presented this program in an extremely negative manner." There were rustlings along the way that the campaign against the factory in Ivangrad was started so that the same plant could be constructed somewhere else, because, allegedly, many producers throughout the country were carrying out preparations for putting a manufacturing program into operation which was identical or similar to what was in Falko's program.

Falko, at least for the time being, is finished, but there are still many similar examples of projects which are underway, and which, thanks to the established mechanisms, will run out (and because of this some necessary investments will remain in the planning stage). Let us hope that the Agreement on Mutual Criteria for Social and Economic Coordination and Justification of Planned Investments will quickly be adopted, because, for example, the Tuzla Milk Plant is working at one-seventh capacity, and they are planning to construct a new milk facility in Modrica, Bijeljina, and Doboj, in the same purchasing region.

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#### YUGOSLAV INTEREST IN MICROELECTRONIC COOPERATION WITH CEMA

[Editorial Report] In an interview published in the 17 July 1984 issue of PRIVREDNI PREGLED (Belgrade, page 2), Mito Pejovski, Federal Executive Council member and permanent Yugoslav representative in CEMA, said that microelectronics, microprocessing technology, and industrial robots was one of the most important subjects on the agenda of the Moscow CEMA executive committee meeting in June; and that Yugoslavia expressed its intention at that time to join the General CEMA Agreement in this field of cooperation. He said that Yugoslavia expressed interest in cooperating in certain areas of this program even at the 1982 CEMA meeting in Budapest and now believes that an affirmative response will be forthcoming for participation in the program for the 1982-1990 period. He said "our economy and scientific institutions have assessed the importance of developing and applying microprocessing technology and have started to follow the development of technology in this sector. We are aware that lagging in this field, as was said at the meeting in Moscow, can have long-term negative results. ... While we have achieved some results and have potential, we lack the objective possibility to follow development adequately and we are lagging in some respects. Pejovski said, enterprises interested in such cooperation, for instance "Iskra" in Kranj, "Litostroj" in Ljubljana, "Rade Koncar" in Zagreb, "Elektronska Industrija" in Nis, "Energoinvest" in Sarajevo, the "Mihailo Pupin" Institute in Belgrade, "Prva Petoletka" in Trstenik, and others have applied for cooperation on 54 subjects of the more than 100 offered in the program, adding that Yugoslavia also expects to cooperate in new CEMA programs in automated production.

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#### BRIEFS

EMERGENCY OUTLAYS FOR STUDENTS--In order to protect the standard of living of the most threatened category of citizens, 244,890 million dinars will be allocated as an interventionist measure from the Serbian Republic budget until systematic solutions are found. This is the essential amendment to the draft law on changes and additions to the 1984 Serbian Republic budget which was established on 11 July by the Serbian executive council and which is only one of a number of measures to be taken for this purpose. The executive council also decided to increase the budgetary limit of the republic Community for [Profession]-Directed Education so that this community can have 180 million dinars more to solve the most severe problems in regard to students' living standards. The executive council also approved a loan to this community of 70 million dinars from the permanent reserves of the republic. It was also recommended that 58 million dinars be provided for emergency intervention to improve students' standard of living. The executive council recommended to the community that it prepare as soon as possible a plan to reconstruct and modernize the housing and canteen areas in the Belgrade Student City. [Excerpt] [Belgrade BORBA in Serbo-Croatian 12 Jul 84 p 4]

BANK COOPERATION WITH GREECE--A delegation from the Agricultural Bank of Greece, led by its governor Kafiris, is on a working visit to the Agrobank or specialized agricultural bank in Belgrade. This visit is part of the program for long-term cooperation of the two banks. The discussions which were held today between the Greek delegates and representatives of the Associated Belgrade Bank and the Agrobank stressed the interest of the Greek Government and Greek agricultural bank in devoting more attention to forms of cooperation between Greece and Yugoslavia. Both sides have recommendations from their governments to promote trade and scientific-technical cooperation and joint investment. The Greeks showed great interest in purchasing small agricultural machinery and other products for agricultural use; for this reason they have visited the "Zmaj" enterprise in Zemun and IMT in Novi Beograd. They will also visit the "Zorka" plant in Sabac and the orchards, vineyards, processing capacities and the Belgrade Agricultural Combine's tourist project in Herceg-Novi. Concrete business proposals on the program of cooperation will be examined at the end of the month. [Excerpt] [Belgrade PRIVREDNI PREGLED in Serbo-Croatian 20 Jul 84 p 4]

OIL PRODUCTION—In the first half of this year refineries processed only 5.745 million tons of domestic and imported oil instead of the 7.6 million tons

planned. Because of a lack of hard currency, as well as dinars, only 1.172 million tons instead of the planned 2.825 million tons were imported from the convertible currency area; also 703,000 tons less than planned were imported from the clearing-account area. According to the energy balance sheet, a total of 10.6 million tons of oil is to be imported this year; later it was said that one could figure on 11.1 million tons. Lower production has resulted in the shortage of all kinds of oil products; most often mentioned is the lack of kerosene and crude gasoline, as well as mazut. The shortage would be considerably more if oil derivatives had not been purchased from abroad. This year \$80 million worth of derivatives is planned to be imported; for the first half of this year \$60 million worth of imports has been approved. [Excerpt] [Belgrade PRIVREDNI PREGLED in Serbo-Croatian 21-22 Jul 84 p 12]

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